



Painting and powder coating

Hot Dip Galvanizing by itself is a long lasting and cost effective means of corrosion protection. When organic coatings such as paint or powder coatings are applied over galvanized steel, the resulting combination is known as a duplex coating

:These coatings are used to

- add colour for aesthetic, camouflage, or safety purposes
- increase the economic life of a structure
- provide additional protection in very aggressive environments

All paint systems used should be specifically formulated for use on galvanized steel and applied in accordance with the paint manufacturer's recommendations

The choices of paint systems will depend upon both the application and service environment. With the decline in the use of chlorinated rubber and alkyd paints, high-build epoxy products and vinyl/vinyl co-polymer systems are increasingly utilised with glass reinforced epoxy being an option for more severe

environments. In multi-coat systems the use of micaceous iron oxide (MIO) primer has been shown to give improved adhesion

Two-pack polyurethane and acrylic urethanes are commonly used as top coats and offer good durability and colour retention. Alternatives include acrylic epoxies and polysiloxanes, the latter offering increased abrasion resistance along with good gloss and colour retention

At present, high-build epoxies are widely used although water-based products, including polyurethanes, are now being specified. They are less tolerant of poor pre-treatment but their use could continue to grow as the Solvent Emissions Directive becomes more stringen