



# FINISHES

## ZINC COATING

PHD offers 3 basic forms of zinc coating on its products:

- 1) **Electro-Plated Zinc** (Electro-galvanized)
- 2) **Pre-Galvanized Zinc**
- 3) **Hot Dipped Galvanized**

*Note: The corrosion resistance of zinc is based on its thickness, the environment and the coating process used.*

### ELECTRO-PLATED ZINC (ASTM B633 SC1)

This type of coating is recommended for use indoors in relatively dry areas. The steel is submersed in a bath of zinc salts, through the process of electrolysis, a coating of pure zinc adheres to the steel with a molecular bond. A maximum of .5 mills of zinc can be applied using this method.

### PRE-GALVANIZED ZINC (ASTM A653 COATING G90)

This type of coating is suitable for extended exposure in dry or mildly corrosive atmospheres but not generally recommended for use outdoors in industrial environments. Also known as “mill galvanized” or “hot-dipped mill galvanized” pre-galvanized zinc coatings are produced by rolling the steel coils or sheets through molten zinc, at the steel mill, the material is then cut or slit to size. Coating thickness is .90 ounces per square foot of steel surface. Zinc near the uncoated edges or weld areas becomes a sacrificial anode which protects the bare areas. PHD uses this type of material on our Fig. 141 and Fig. 151 swivel ring hangers.

### HOT-DIP GALVANIZED (ASTM 123)

Recommended for prolonged outdoor exposure and will usually protect steel in most atmospheric environments. After fabrication the part is immersed in a bath of molten zinc. A metallurgical bond is formed resulting in a zinc coating that coats all surfaces including edges. Please note that some items cannot be hot-dipped galvanized due to design, tolerances or threaded components. Check with the PHD factory or your local representative when questionable. Threaded components on hot dipped galvanized products will be electro-plated.