Technical Procedure

Cold Gal Application Procedure

Introduction

This process refers to the application of cold gal on International Poles/Auspole Products (IPAP) hot dip galvanised products. Cold gal is an industry term and is not actually galvanising but choosing the correct cold gal product for repairs to hot dip galvanised items will offer very similar barrier and cathodic protection of the steel. Further detail on repairs and alternate methods can be found in AS/NZS 4680.

Products to Use

There are many cold gal products on the market, however; we recommend using cold gal that is at least 90% pure zinc. Suitable examples are Dy-Mark Zinc Guard (91%) and Zinga (96%).

Preparation & Application

If the manufacturer's recommended procedure is different to the following, follow the manufacturer's instructions.

1. The surface is to be clean, dry and free of all contaminants, such as rust, oil, grease, dirt and salt.
2. The damaged area should be taken back to sound substrate (firmly adhered hot dip galvanising) or bare metal. If no surface rust has commenced on the damaged area, sand lightly and clean.
3. For aesthetic reasons, there is no need to prepare and coat areas where the hot dip galvanising is intact. Cover undamaged areas to avoid overspray.
4. If using a spray can, shake the can for at least 45 seconds after the mixing ball begins to rattle.
5. Hold the can 20 to 25cm from the surface and spray without causing the cold gal to run. Shake frequently between sprays. Repairing small scratches should require very little cold gal.
6. If brushing the cold gal on, coat only the area where the surface has been prepared.
7. The cold gal should be touch dry in about 30 minutes and can be recoated after an hour. A minimum dry film thickness (DFT) of 100µm is required.
8. It will be completely dry after 24 hours, in temperatures ranging from 10 to 40^{o}C.

Be careful not to over-repair galvanised products and detract from the aesthetics of the finish. Small scratches (less than 3mm wide) in mildly corrosive environments, probably don't need repairing. The cathodic protection of the zinc will prevent extensive corrosion of the steel. Street light poles are often scratched and not repaired during installation. The cathodic protection provided by the hot dip galvanising is the reason why you will very seldom see a light pole with rust streaks developing down its length.