

Electro Seal

"TRIPLEX™" Coating System the leading finish to exterior steelwork

What is it?

It is a system of galvanising and double powder coating giving the BEST in corrosion protection and paint finishes. Triplex was developed by Electro Seal over a 7-year period to add a product, which would fill the performance and warranty gap which existed in the metal finishing market place. The demand for a superior galvanising finish, powder coating topcoat with improved adhesion and an extended service life drove its development.

Where is it used?

Where the best available corrosion protection is needed along with the benefits of a powder coat finish.

It can be used on structural steel and items for external use such as support framework for covered areas, handrails, gates, grills, decorative structures, veranda structures etc.

Benefits

1. Our galvanising is in Aluminium/Zinc mix, which is a superior anode to steel than zinc.
2. Our galvanising is applied under strict conditions and is free of the dags, dross and uneven finishes of conventional galvanising.
3. The galvanising can be applied to a predetermined thickness and to specific areas as needed
4. All items can be totally sealed at fabrication so there are no unsightly drain holes to spoil the appearance of a structure.
5. Adhesion of our galvanising is up to 4 times greater than conventional inorganic coatings.
6. Powder coating is applied within hours of galvanising before the surface has begun to oxidise (the source of a large percentage of failures in a galvanising/powder coat finish)
7. The double powder coat layer ensures flat even finishes over the galvanising and creates an almost totally impervious barrier to prolong the life of the galvanising.
8. The whole system is applied and controlled at our site at Crestmead to ensure total quality control, efficient lead times and reduced costs.
9. Our total "in house" system will ensure hassle free shopping and the performance you expect from steelwork is easier to achieve than you ever thought possible.

Call "Electro Seal" now to see how we can solve your structural coating problems.

With many jobs already in the field, a long life for your structure begins TODAY!

"Technical data ... TRIPLEX™"

The System

1. Abrasive blast to Class 3
2. Application of Spray Galvanising in Aluminium & Zinc
3. Double Powder Coat

Technical details

- a) Abrasive Blasting: Class 3 is the cleanest metal achievable and is a world wide recognised standard known as the "white metal" finish

b) Spray Galvanising:- Uses a mixture of Aluminium and Zinc 50/50 by volume effectively giving a zincalume finish

Aluminium	99.5% pure
Zinc	99.9% pure
Al/Zn mix bond strength to steel	5600 N/cm ²
Interparticle strength	20300 N/cm ²

c) Powder Coat finish: Is available in standard polyesters or the new generation high durability powders

How to specify TRIPLEX™

1. Check with Electro Seal representative that sizes and construction suit process equipment criteria.
2. Manufacture in bare steel only. Factory finishes such as blue and red primers are okay as is surface rust.
3. Drill NO holes in hollow sections. Ensure the fabrication is sealed wherever practical. Design changes should be considered to allow for total sealing.
4. Ensure fabrication allows on site assembly without remedial work, which could disturb the coating system.
5. Break all sharp edges and radius comers. Generally consult design considerations of AS/NZS 2312:1994 clause 4.3.4.1 to 4.3.5.9.
6. Finishing system is TRIPLEX™ Coating System by Electro Seal.
7. Performance warranty is 10 years on corrosion, powder coat film integrity and adhesion. Include colour and gloss retention for 10 years if client requires.

Warranty

1. Electro Seal warrants the workmanship unconditionally on the TRIPLEX™ System.
2. The base steel is warranted against corrosion for 10 years provided:

Maintenance

- a) Parts allow for spray galvanising to all exposed faces
 - b) Parts are totally sealed
 - c) The items are located and used as specified
 - d) No work is carried out on the finished goods, which in any way disrupts the integrity of the coating layers. Avoid corrosion cycles through contact of dissimilar metals
 - e) No damage occurs to the integrity of the coating layers during the period of the warranty
 - f) It is understood the base steel is protected by the galvanising layer and any exposure of that layer to the elements will result in its deterioration by design and is not warranted against
 - g) The coating is maintained to meet the requirements of AS3715 and AS4506 and that the coating is cleaned such as would keep it clean as clear glass in the same area.
3. The final powder coat layers are not warranted against loss of gloss or colour unless incorporating the use of functional high durability films selected for the purpose.

Test Results 1000 Hrs Neutral Salt Spray to AS1580 481.1.9 and ASSISO 481.3 with coating layer scribed through to base metal. Result was no visible rusting of base metal, no undercreep corrosion. Appearance excellent and no defects.