SURFACE PREPARATION FOR THE APPLICATION OF PROTECTIVE COATINGS ON GALVANISED STEEL

SPECIFICATION: A3  ISSUE: 3  DATE: JULY 2019

1.0 SCOPE

The scope of this specification applies to operations required for the surface preparation of Galvanised Steel.

Refer Design Standard, DS 95 (Standard for the Selection, Preparation, Application, Inspection, and Testing of Protective Coatings on Water Corporation Assets) for additional information or clarification.

2.0 PURPOSE

The purpose of this specification is to prepare Galvanised Steel surfaces for the application of a protective coating.

3.0 DEFINITIONS

| Contractor: | The service provider or its sub-contractor who will undertake the works. |
| Corporation: | The Water Corporation and the Principal for the purposes of externally contracted asset delivery. |
| ITP: | The detailed Inspection and Test Plan(s) for the Works. |
| NACE: | National Association of Corrosion Engineers. |
| Superintendent: | The Superintendent for the contract, as defined in the conditions of the contract, who is appointed by the Water Corporation to manage/oversee the work under the contract on behalf of the Water Corporation. |
| Works: | The surface preparation, coating application and inspection to be undertaken by the contractor to which this coating specification applies. |
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4.0 COATING APPLICATOR/PERSOONEL QUALIFICATION

4.1 Work shall only be carried out by a competent person.

4.2 The work shall be undertaken by an approved Water Corporation Corrosion Control Panel
Services member, unless approved otherwise by the Team Leader – Asset Durability

4.3 The Applicator’s Coating Supervisor shall possess as a minimum one of the following
certifications:
   • ACA - Coating Inspector; or
   • NACE - CIP Level I Coating Inspector.

4.4 The coating contractor shall nominate a Coating Inspector as their Quality  
Control Officer to carry out inspections, submit the ITP, undertake the required testing and 
maintain appropriate records for all work performed.

      The Applicator’s Coating Inspector shall possess as a minimum one of the following 
certifications:
      • ACA - Coating Inspector; or
      • NACE - CIP Level I Coating Inspector.

5.0 ATMOSPHERIC CONDITIONS

5.1 Prior to and during surface preparation, the contractor shall record details pertaining to 
environmental conditions including ambient and surface temperature, relative humidity 
and dew point.

6.0 SURFACE PREPARATION

6.1 Prior to the commencement of blast cleaning, all oil and/or dirt shall be removed by 
solvent cleaning or other accepted methods.

6.2 Whip blast the surface/s using garnet to comply with the requirements of AS/NZS 
4680. Ensure all zinc corrosion products (white rust) and other surface contaminants 
are completely removed.

6.3 The surface shall be lightly profiled to provide a suitable key for the coating system to 
adhere to with a minimal reduction in the galvanized coating thickness. The surface 
profile shall not exceed 30 microns.
6.4 Galvanized steel work not required to be coated shall be protected with masking materials which shall be completely removed by the Contractor after completion of the work.

6.5 Sharp edges shall be radiused to a minimum of 2 mm.

7.0 INSPECTION

7.1 The contractor shall maintain records and evidence of the blast surface and blast profile. These shall be made available to the Superintendent and/or delegate at the completion of the project.

7.2 The Contractor shall give the Superintendent (or nominated delegate) adequate prior notice as to when and where the surface preparation and coating operations will be conducted to facilitate all specified inspections.

7.3 If recognised as a hold point in the ITP, then coating application shall not be carried out until the Superintendent has accepted the surface preparation.

8.0 CONTRACTOR'S RESPONSIBILITY

8.1 The Contractor shall supply all necessary plant, equipment, materials, and labour, prepare the surface and apply and maintain the protective coating in accordance with this specification.

8.2 An Inspection Test Plan (ITP) shall be forwarded to the Water Corporation for review a minimum of ten working days prior to the commencement of work.

8.3 A list of all items to be inspected and the relevant drawing reference shall be forwarded to the Water Corporation Coating Inspector prior to the inspection being undertaken.

8.4 The preceding inspection clauses shall not relieve the Contractor of their responsibility to supply materials and perform work in accordance with the requirements of any overriding contract documentation.

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