COATING SPECIFICATION

ANTI-GRAFFITI COATING ON EXISTING AND NEW STEEL, CAST IRON, STAINLESS STEEL, GALVANISED STEEL AND SINTAKOTE® STRUCTURES

COATING SPECIFICATION: J1 ISSUE: 3 DATE: JULY 2019

1.0 SCOPE

This document summarises the coating procedure for the application of an “Anti-graffiti Polyurethane” top coat to replace the specified top coat in Water Corporation coating specifications B2, C2, C4, E3, E4, E5 and M7.

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 coating specification is to provide guidance on the application of anti-graffiti coating on exterior services of Steel, Cast Iron, Stainless Steel, Galvanised Steel, Aluminium and Sintakote® structures in potable and wastewater applications.

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. |
| DFT: Dry Film Thickness. |
| 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 contract, who is appointed by the Water Corporation to manage/oversee the work under the contract on behalf of the Water Corporation. |
| TDFT: Total Dry Film Thickness. |

Works: The surface preparation, coating application and inspection to be undertaken by the contractor to which this coating specification applies.

4.0 COATING MATERIALS

4.1 Coating materials used for attaining the specified standard shall be selected in accordance with Appendix 3 of DS-95- commonly used coatings in potable water and
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4.2 The coating components shall be thoroughly mixed in the specified proportions. Material so prepared shall be used within the “pot-life” period claimed by the manufacturer for the relevant site conditions.

4.3 Coating specifications inclusive of datasheets, coating application, method statements and ITP’s shall be submitted to the Principal for approval at least 10 working days prior to commencement of the work.

4.4 Recommended drying times between coats for on-site conditions shall not be exceeded.

5.0 COATING THICKNESS

5.1 Replace the specified top coat in Corporation coating specifications B2, C2, C4, E3, E4, E5 and M7 with 2 coats of 50 microns nominal dry film thickness “Anti-graffiti Polyurethane” top coat with a total thickness of 100 microns.

6.0 ATMOSPHERIC CONDITIONS

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

6.2 Coating application shall not commence if any one of the following conditions exists:

- The relative humidity is above 85%;
- The substrate temperature is less than dew point plus 3°C;
- The substrate temperature is below 10°C;
- The substrate temperature is above 55°C;
- The surface to be coated is wet or damp;
- Where the full prime coat application cannot be carried out before the specified cleanliness of the surface deteriorates;
- If the weather is deteriorating or is unfavorable for application or curing;
- If the pot life of the paint has been exceeded.
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7.0 COATING FINISH

7.1 The finished coating shall be of uniform thickness, colour, appearance and gloss. It shall be fully cured, insoluble, adherent, coherent and free from holidays, laps, sags, blistering, checking, wrinkling, overspray, patchiness and any other defects that may impair the performance and/or appearance of the coating.

8.0 CARE AND MAINTENANCE OF FINISH COAT

8.1 Refer Graffiti Eraser data sheet supplied by paint manufacturer. When performing any cleaning activity which requires the use of volatile solvents or strong cleaning agents, always ensure that there is adequate ventilation and appropriate PPE are worn.

9.0 COATING APPLICATOR/PERSONNEL QUALIFICATION

9.1 Work shall only be carried out by competent personnel.

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

9.3 Surfaces to be coated which will become inaccessible after assembly or erection shall be cleaned and painted before they become inaccessible.

9.4 The Applicator’s Coating Supervisor shall possess as a minimum one of the following certifications:

- ACA - Corrosion Inspector; or
- NACE - CIP Level I Coating Inspector.

9.5 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.
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10.0 INSPECTION AND TESTING OF COATING

10.1 Coatings shall be visually examined for surface defects and any discontinuity arising after curing shall be recorded.

10.2 The results of this test shall be submitted to the Superintendent along with the ITP, other relevant product information and coating application procedures for review a minimum of 10 days prior to commencing work.

11.0 REPAIR OF A DEFECTIVE COATING AND RETESTING

11.1 Coatings with the defective areas equal to 20% or more of the total coated surface, will be rejected outright.

11.2 Defects such as pinholes, cracks, blisters, voids, foreign inclusions and irregular profile peaks shall be marked for repair and retested upon full cure of the repaired coating.

12.0 RECORDING AND REPORTING

12.1 Following testing a report shall be submitted by the Contractor. The Contractor shall keep detailed records and reports including the following:

- Environmental conditions (relative humidity, dew point etc.);
- Surface preparation;
- Surface profile;
- Coating application;
- Coating testing; and
- General failure.

12.2 To supplement these records, prior to any works commencing, an Inspection Test Plan (ITP) shall be forwarded to the Corporation for review a minimum of 10 working days prior to the commencement of work.

13.0 CONTRACTOR'S RESPONSIBILITY

13.1 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.

13.2 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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