

SURFACE PREPARATION FOR THE APPLICATION OF PROTECTIVE COATING ON FUSION BONDED POLYETHYLENE [SINTAKOTE[®]]

SPECIFICATION: A7ISSUE: 4DATE: NOVEMBER 2022

1.0 SCOPE

The scope of this specification applies to operations required for the surface preparation of fusion bonded polyethylene (Sintakote[®]) material.

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

2.0 PURPOSE

The purpose of this specification is to prepare a fusion bonded polyethylene (Sintakote[®]) substrate for the application of a protective coating

3.0 DEFINITIONS

ACA: Australasian Corrosion Association.

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 GENERAL

- 4.1 Application and surface preparation shall only be carried out by competent personnel.
- 4.2 The work shall be undertaken by an approved Water Corporation Panel Protective Coating and Concrete Repair Services member, unless approved otherwise by the Team Leader – Asset Durability.
- 4.3 The coatings contractor/subcontractor shall nominate a certified coating inspector (NACE or ACA). Qualification to SSPC and equivalent will require written approval by the Principal. The certified coating inspector shall conduct the following:
 - Prepare quality assurance documentation to meet the specified standards given herein and the required acceptance criteria.
 - Perform inspections and maintain appropriate records for work performed.
 - Test, monitor and verify surface preparation and coating application.

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 All termination edges of Sintakote[®] must be chamfered to 45°. Any visible signs of Sintakote edges lifting shall be further chamfered back to a sound adherent finish. Coating Specification L1 provides details of Sintakote cutback requirements from weld margins, and Coating Spec L1, Appendix A.
- 6.2 Abrasive blasting using 30/60 mesh grit with stand-off position 150-200 mm and 700 KPa pressure should provide a suitable key for the coating system to adhere. Care should be taken to prevent "excessive scuffing" to the fusion bonded polyethylene material. The above abrasive blasting method shall also be used for the concrete encasement of the Sintakote[®] pipe.
- 6.3 Sintakote® not required to be coated shall be protected with masking materials which shall be completely removed by the Contractor after completion of the work.
- 6.4 Coating shall not be applied to surfaces, which have become contaminated or deteriorated after cleaning



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7.0 INSPECTION

- 7.1 Plant, equipment, materials and methods used shall be subject to inspection and acceptance by the Superintendent (or nominated delegate) prior to commencement of any work.
- 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 and 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 (or nominated delegate) 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.

Document Revision History					
Sect	Issue	Date	Revision Description	RVWD	APROV
2	4	17/11/2022	Rewording purpose	AO	SS
3	4	17/11/2022	Amend definitions	AO	SS
4	4	17/11/2022	Amend coating application qualifications	AO	SS
6	4	17/11/2022	Rewording surface preparation	AO	SS

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