

Revised 12/12

SPECIFICATIONS - DETAILED PROVISIONS
Section 09879 - Approved Materials List for Coatings
and Paints for Steel Tanks

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**SECTION 09879
APPROVED MATERIALS LIST FOR COATINGS
AND PAINTS FOR STEEL TANKS**

PART 1 - GENERAL

1.01 INTERIOR COATING SYSTEMS

Coating materials for interior surfaces must appear on the former "EPA Listing of Acceptable Drinking Water Additives", Run date: 05/08/89, formerly published by the Environmental Protection Agency, or Standard 61 of the National Sanitation Foundation (NSF), or Standard 61 of the Underwriters' Laboratory (UL). Products containing perchloroethylene (PCE), trichloroethylene (TCE), lead, chromium or zinc will not be permitted unless the District makes a provision in the Special Conditions to use a coating system containing zinc, NSF approved, as follows:

Zinc Interior System

Prime Coat:	91 H2O Tneme-Zinc @ 3 mils
Intermediate Coat:	20 Pota-Pox @ 4 mils
Finish Coat:	20 Pota-Pox @ 4 mils

Zinc Exterior System

Prime Coat:	91 H2O Tneme-Zinc @ 3 mils
Intermediate Coat:	20 Pota-Pox @ 4 mils
Finish Coat:	75 Endura-Shield @ 2.5 mils

or approved equal.

1.02 INTERIOR SURFACES, EPOXY COATINGS

A. ICI Devoe:

Surface preparation:	+SSPC-SP10 (Near White Metal Blasting)
First Coat:	High Solids Epoxy, Bar-Rust 233H, OFT 5.0 mils
Second Coat:	High Solids Epoxy, Bar-Rust 233H, OFT 5.0 mils
Finish Coat:	High Solids Epoxy, Bar-Rust 233H, OFT 5.0 mils

Minimum Total

Dry Film Thickness: 15.0 mils Section 09879 -2

- B. Tnemec:
Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: Epoxy, Pota-Pox Series 20FC or Series 140, OFT 5.0 mils
Second Coat: Epoxy, Pota-Pox Series 20FC or Series 140, OFT 5.0 mils
Finish Coat: Epoxy, Pota-Pox Series 20FC or Series 140, OFT 5.0 mils

Minimum Total

Dry Film Thickness: 15.0 mils

- C. Carboline:
Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: High Solids Epoxy, Carboguard 891, OFT 5.0 mils
Second Coat: High Solids Epoxy, Carboguard 891, DFT 5.0 mils
Finish Coat: High Solids Epoxy, Carboguard 891, DFT 5.0 mils

Minimum Total

Dry Film Thickness: 15.0 mils

- D. Sherwin-Williams:
Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: High Solids Epoxy, TANK CLAD HS B62W80, DFT 5.0 mils
Second Coat: High Solids Epoxy, TANK CLAD HS B62W80, DFT 5.0 mils
Finish Coat: High Solids Epoxy, TANK CLAD HS B62W80, DFT 5.0 mils

Minimum Total

Dry Film Thickness: 15.0 mils

- E. Corchem:
Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: Epoxy, Corchem 4460 Acro Epoxy, OFT 5.0 mils
Second Coat: Epoxy, Corchem 4460 Acro Epoxy, DFT 5.0 mils
Finish Coat: Epoxy, Corchem 4460 Acro Epoxy, OFT 5.0 mils

Minimum Total

Dry Film Thickness: 15.0 mils F.

- F. Ameron International:
Surface preparation: SSPC-SP10 (Near White Metal Blasting)
- First Coat: Fast Dry High-Solids Epoxy, Americoat 370, OFT 5.0 mils
- Second Coat: Fast Dry High-Solids Epoxy, Americoat 370, OFT 5.0 mils
- Finish Coat: Fast Dry High-Solids Epoxy, Americoat 370, OFT 5.0 mils
- Minimum Total
Dry Film Thickness: 15.0 mils

All interior finish coats shall be white in color.

Open seams, including circumferential seam at shell/roof junction and other seams designated by the District shall be caulked with a non-sag polysulphide or polyurethane material conforming to TT-S-230, Type 2, or other approved material.

1.03 INTERIOR SURFACES, COAL TAR ENAMEL COATINGS

The following products are the only domestically produced enamels in the United States. Accordingly, these products and systems have an extensive history of successful applications for interiors of steel water tanks.

- A. Reilly Industries, Inc.:
- Surface preparation: SSPC-SP10 (Near White Metal Blasting)
- First Coat: Reilly 122 Synthetic Adhesive, OFT 1.0 mils
- Finish Coat: Reilly AWWA Type II Enamel, OFT 3/32"

1.04 EXTERIOR SURFACES, EPOXY/URETHANE SYSTEMS

The following products have been successfully applied as a complete system or as an overcoat to all exterior surfaces of other steel water tanks. These products or approved equals should be taken into consideration when recoating those areas on the exterior of tanks where other work in this specification has taken place to ensure color match and coatability to this product.

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A. Sherwin-Williams

Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: Epoxy, DURA PLATE 235 B67-235, DFT 2.0-3.0 mils
Second Coat: Epoxy, DURA PLATE 235 B67-235, DFT 2.0-3.0 mils
Third Coat: Urethane, ACROLON 218 HS B65-600, DFT 3.0-4.0 mils
Minimum Total
Dry Film Thickness: 7.0-9.0 mils

B. ICI Devco:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: Epoxy, Bar-Rust 231 H, DFT 2.0-3.0 mils
Second Coat: Epoxy, Bar-Rust 231 H, DFT 2.0-3.0 mils
Third Coat: Urethane, Devthane 379, DFT 2.0-3.0 mils
Minimum Total
Dry Film Thickness: 6.0-9.0 mils

C. Tnemec:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)
First Coat: Epoxy, Pota-Pox Series 20, DFT 2.0-3.0 mils
Second Coat: Epoxy, Pota-Pox Series 20, DFT 2.0-3.0 mils
Finish Coat: Urethane, Endura Shield, Series 74, DFT 2.0-3.0 mils
Minimum Total
Dry Film Thickness: 6.0-9.0 mils

D. Carboline:

Surface preparation: SSPC-SP10 (Near White Metal Blasting) Section 09879 -5
First Coat: Epoxy, Carboguard 893, OFT 2.0-3.0 mils
Second Coat: Epoxy, Carboguard 893, OFT 2.0-3.0 mils
Third Coat: Urethane, Carbothane 134HG, OFT 2.0-3.0 mils
Minimum Total
Dry Film Thickness: 6.0-9.0 mils

E. Corchem:

Surface preparation: SSPC-SP10 (Near White Metal Blasting) First Coat: Epoxy, Corchem 4460 Acro Epoxy, DFT 2.0-3.0 mils Second Coat: Epoxy, Corchem 4460 Acro Epoxy, DFT 2.0-3.0 mils Finish Coat: Urethane, Corchem 274, DFT 2.0-3.0 mils
Minimum Total

Dry Film Thickness: 6.0-9.0 mils

F. Ameron International

Surface preparation: SSPC-SP10 (Near White Metal Blasting) First Coat: Amerlock 400 DFT 3.0 mils Second Coat: Amerlock 400 DFT 3.0 mils Finish Coat: Amershield Top Coat, OFT 4.0 mils Minimum Total

Dry Film Thickness: 10.0 mils

Open seams, including circumferential seam at shell/foundation junction and other seams designated by District shall be caulked with a non-sag polysulphide or polyurethane material conforming to TT-S-230, Type 2, or other approved material.

1.05 EXTERIOR SURFACES, ALKYD/SILICONE ALKYD SYSTEMS

The following products have been successfully applied as a complete system or as an overcoat to all exterior surfaces of other steel water tanks. These products or approved equals should be taken into consideration when recoating those areas on the exterior of tanks where other work in this specification has taken place to ensure color match and coatability to this product.

A. Carboline:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)

First Coat: Alkyd, Carbocoat 150, DFT 2.5 mils

Second Coat: Alkyd, Carbocoat 150, DFT 2.0 mils

Third Coat: Silicone Alkyd, Carbocoat 30, DFT 1.5 mils

Minimum Total

Dry Film Thickness: 6.0 mils

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B. ICI Devco:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)

First Coat: Alkyd, Oevguard 4160, OFT 2.5 mils

Second Coat: Alkyd, Oevguard 4160, OFT 2.0 mils

Third Coat: Silicone Alkyd, Devsheild 47S, OFT 1.5 mils

Minimum Total

Dry Film Thickness: 6.0 mils

C. Corchem:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)

First Coat: Alkyd, Corchem 4S, OFT 2.5 mils

Second Coat: Alkyd, Corchem 122, DFT 2.0 mils

Finish Coat: Silicone Alkyd, Corchem 182, OFT 1.5 mils

Minimum Total

Dry Film Thickness: 6.0 mils

D. Tnemec:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)

First Coat: Alkyd, Tnemec Series 4 Versare, OFT 2.5 mils

Second Coat: Alkyd, Tnemec Series 2H, OFT 2.0 mils

Finish Coat: Silicone Alkyd, Tnemec Series 82, OFT 1.5 mils

Minimum Total

Dry Film Thickness: 6.0 mils

E. Sherwin-Williams:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)

First Coat: Alkyd, KEM BOND HS BSNZ3, OFT 2.5 mils

Second Coat: Silicone Alkyd, STEEL MASTER 9S00 B56-300, OFT 2.0 mils

Finish Coat: Silicone Alkyd, STEEL MASTER 9500 BS6-300, OFT 1.5 mils

Minimum Total

Dry Film Thickness: 6.0 mils

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F. Ameron International:

Surface preparation: SSPC-SP10 (Near White Metal Blasting)

First Coat: Alkyd, Amercoat 51050, OFT 2.5 mils

Second Coat: Silicone Alkyd, Amercoat 3203, OFT 2.0 mils

Finish Coat: Silicone Alkyd, Amercoat 3202, OFT 2.0 mils

Minimum Total

Dry Film Thickness: 6.5 mil

Open seams, including circumferential seam at shell/foundation junction and other seams designated by the District shall be caulked with a non-sag polysulphide or polyurethane material conforming to TT-S-230, Type 2, or other approved material.

1.06 ANALYSIS OF EXISTING COATING MATERIALS

The District has taken steps to have representative samples of the existing interior coatings and exterior paints analyzed by a qualified laboratory. The results of the analyses are made available as part of the project.

The Contractor shall take the sample analyses results into consideration when planning the blasting, cleaning, and stripping of the existing interior coatings and exterior paints and removal of any loose material and the disposal of coating and paint materials in compliance with all existing regulations. If the information resulting from the analyses is in any respect insufficient, the Contractor shall have additional analyses made at his own cost to ensure compliance with all applicable regulations. Refer to results of existing laboratory analyses of coating and paint samples.

END OF SECTION 09879