

COATING SPECIFICATION (WATER AND REUSE TREATMENT FACILITIES)

1. SCOPE

- 1.1. This specification defines the methods of surface preparation, coating systems, and methods of application for painting as outlined herein.
- 1.2. The Contractor shall furnish all supervision, labor, tools, materials, equipment, Scaffolding or other structures, and supervision required for the transportation, unloading, storage, and application of the paint and associated products covered by this specification.
- 1.3. The work includes painting and finishing of interior and exterior exposed items above and below grade surfaces, such as structural steel, miscellaneous metals, ceilings, walls, floors, doors, frames, pipe, handrails, posts, fittings, valves, pumps, tanks, equipment, and all other work obviously required to be painted unless otherwise specified herein or on the drawings. The omission of minor items in the schedule of work shall not relieve the contractor of his obligation to include such items where they come within the general intent of the specification as stated herein.
- 1.4. The following items will not be painted:
 1. Any code requiring labels, such as Underwriters' Laboratories and Factory Mutual, or any equipment identification, performance rating, name or nomenclature plates.
 2. Any moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, linkages, sinkages, sensing devices, motor and fan shafts, unless otherwise indicated.
 3. Aluminum handrails, walkways, windows, louvers, and grating unless otherwise specified herein.
 4. Signs and nameplates.
 5. Finish hardware.
 6. Stainless steel angles, tubes, pipe, etc.
 7. Products with polished chrome, aluminum, nickel, or stainless steel finish.
 8. Plastic switch plates and receptacle plates.
 9. Flexible couplings, lubricated bearing surfaces, insulation and metal and plastic pipe interior.
 10. Sprinkler heads.
- 1.5. All work shall be done in strict accordance with this specification, the design drawings

and the painting package, including manufacturer's printed instructions.

- 1.6. The Contractor will obtain, at its own expense, all permits, licenses and inspections and shall comply with all laws, codes, ordinances, rules, and regulations promulgated by authorities having jurisdiction, which may bear on the work. This compliance will include Federal Public Law 91-596 more commonly known as the "Occupational Safety and Health Act of 1970."
- 1.7. Wherever the word "Engineer" occurs in this specification, it shall apply to the authorized representative of the City of Pompano Beach. Where the word "Contractor" occurs in this specification, it shall apply to the contractor performing any part of or all of this work.
- 1.8. Surfaces to be painted: (Refer to 17.0 Coating Schedule for description of surfaces to be painted and their specified coating systems and colors).

2. DEFINITIONS

- 2.1. Field Painting is the painting of new or rebuilt items at the job site. Field painting shall be the responsibility of the Contractor.
- 2.2. Shop Painting is the painting of new or rebuilt items in the shop prior to delivery to the jobsite.
- 2.3. Abbreviations The abbreviations and definitions listed below, when used in this specification, shall have the following meanings:
 - 2.3.1. SSPC – Society for Protective Coatings
 - 2.3.2. Exterior – Outside, exposed to weather
 - 2.3.3. Interior Dry – Inside, not subject to immersion service
 - 2.3.4. Interior Wet – Inside, subject to immersion service
 - 2.3.5. ASTM – American Society of Testing Materials
 - 2.3.6. NACE – National Association of Corrosion Engineers
 - 2.3.7. NSF – National Sanitation Foundation (Standard 61)
 - 2.3.8. AWWA – American Water Works Associates (AWWA D102-97)
 - 2.3.9. ICRI – International Concrete Repair Institute
 - 2.3.10. CSP – Concrete Surface Profile (1-9)

3. RESOLUTION OF CONFLICTS

- 3.1. It shall be the responsibility of the Contractor to arrange a meeting prior to the start of painting, or flooring installation between the Contractors, the Paint Manufacturer, whose products are to be used, and the Engineer. All aspects of surface preparation, application and coating systems as covered by this specification will be reviewed at

this meeting.

- 3.2. Clarification shall be requested promptly from the Engineer when instructions are lacking, conflicts occur in the specification, or the procedure seems improper or inappropriate for any reason.
- 3.3. Copies of all manufacturer's instructions and recommendations shall be furnished to the Engineer by the Painting Contractor.
- 3.4. It shall be the responsibility of the Coating Manufacturer to have their factory representative meet in person with the Contractor and Engineer a minimum of three times during the job as a consultant on surface preparation, mil thickness of coating and proper application of coating unless meeting is determined to be unnecessary by the Engineer.

4. INSPECTION OF SURFACES

- 4.1. Before application of the prime coat and each succeeding coat, all surfaces to be coated shall be subject to inspection by the Engineer. Any defects or deficiencies shall be corrected by the Contractor before application of any subsequent coating.
- 4.2. Samples of surface preparation and of painting systems shall be furnished by the Contractor to be used as a standard throughout the job, unless omitted by the Engineer.
- 4.3. When any appreciable time has elapsed between coatings, previously coated areas shall be carefully inspected by the Engineer, and where, in his opinion, surfaces are damaged or contaminated, they shall be cleaned and recoated at the Contractor's expense. Recoating times of manufacturer's printed instructions shall be adhered to.
- 4.4. Coating thickness shall be determined by the use of a properly calibrated "Nordson-
- 4.5. Mikrotest" "Positest" Coating Thickness Gauge (or equal) for ferrous metal or an OG232 "Tooke" Paint Inspection gauge (or equal) for non-ferrous and cementitious surfaces. Please note that use of the "tooke" gauge is classified as a destructive test.

5. EQUIPMENT

- 5.1. Effective oil and water separators shall be used in all compressed air lines serving spray painting and sandblasting operations to remove oil or moisture from the air before it is used. Separators shall be placed as far as practical from the compressor.
- 5.2. All equipment for application of the paint and the completion of the work shall be furnished by the Contractor in first-class condition and shall comply with recommendations of the paint manufacturer.
- 5.3. Contractor will provide free of charge to the Engineer a "Nordson-Mikrotest" or "Positest" dry film thickness gauge for ferrous metal and an OG232 "Tooke" gauge or equal for non-ferrous and cementitious surface, to be used to inspect coatings by the Engineer and Contractor. The gauges may be used by the Contractor and returned each day to the Engineer. Engineer will return gauges to Contractor at completion of job.

6. MATERIALS

- 6.1. All materials specified herein are manufactured by the TNEMEC Company, Inc., Xypex Chemical Corporation, or Chemprobe Technologies, Inc. These products are specified to establish standards of quality and are approved for use on this project.
- 6.2. Equivalent materials of other manufacturers may be substituted on approval of the Engineer. Requests for substitution shall include Manufacturer's literature for each product giving the name, generic type, descriptive information and evidence of satisfactory past performance and an independent laboratory certification that their product meets the performance criteria of the specified materials.
 - 6.2.1. Abrasion – Fed. Test Method Std. No. 141, Method 6192, CS-17 Wheel, 1,000 grams load
 - 6.2.2. Adhesion – Elcometer Adhesion Tester
 - 6.2.3. Exterior Exposure – Exposed at 45 degrees facing the ocean (South Florida Marine Exposure)
 - 6.2.4. Hardness – ASTM D3363-74
 - 6.2.5. Humidity – ASTM D2247-68
 - 6.2.6. Salt Spray (Fog) – ASTM B117-73
- 6.3. Bidders desiring to use coatings other than those specified shall submit their proposal in writing with the bid opening. Substitutions which decrease the film thickness, the number of coats applied, change the generic type of coating, or fail to meet the performance criteria of the specified materials will not be approved. Prime and finish coats of all surfaces shall be furnished by the same manufacturer.
- 6.4. All coatings to be shop applied must meet the requirements for volatile organic compounds (VOC) of not more than 3.5 lbs/Gallon after thinning.
- 6.5. Colors, where not specified, shall be as selected by the Owner or their Representative.
- 6.6. All coatings in contact with potable water need to be NSF Certified in accordance with ANSI/NSF Standard 61.

7. WORKMANSHIP AND MATERIALS

7.1. Surface Preparation

- 7.1.1. The surface shall be cleaned as specified for the paint system being used. All cleaning shall be as outlined in the Steel Structures Painting Council's Surface Preparation Specification, unless otherwise noted. If surfaces are subject to contamination, other than mill scale or normal atmospheric rusting, the surfaces shall be pressure washed, and acid or caustic pH residues neutralized, in addition to the specified surface preparation.

7.1.1.1. Standards for Surface Preparation

SSPC-SP1 Chemical and/or Solvent Cleaning

Remove all grease, oil, salt, acid, alkali, dirt, dust, wax, fat, foreign matter, and contaminants, etc. by one of the following methods: steam cleaning, alkaline cleaning, or volatile solvent cleaning.

SSPC-SP2 Hand Tool Cleaning

Removal of loose rust, loose mill scale, and loose paint to a clean sound substrate by hand chipping, scraping, sanding, and wire brushing.

SSPC-SP3 Power Tool Cleaning

Removal of loose rust, loose mill scale, and loose paint to a clean sound substrate by power tool chipping, descaling, sanding, wire brushing, and grinding.

SSPC-SP4 Flame Cleaning

Dehydrating and removal of rust, loose mill scale, and some light mill scale by use of flame, followed by wire brushing.

SSPC-SP5 (NACE-1) White Metal Blast Cleaning

Complete removal of all mill scale, rust, rust scale, previous coating, etc., leaving the surface a uniform gray-white color.

SSPC-SP6 (NACE-3) Commercial Grade Blast Cleaning

Complete removal of all dirt, rust scale, mill scale, foreign matter, and previous coatings, etc., leaving only shadows and/or streaks caused by rust stain and mill scale oxides. At least 66% of each square inch of surface area is to be free of all visible residues, except slight discoloration.

SSPC-SP7 (NACE-4) Brush-Off Blast Cleaning

Removal of rust scale, loose mill scale, loose rust, and loose coatings, leaving tightly bonded mill scale, rust and previous coatings. On concrete surfaces, brush-off blast cleaning shall remove all laitance, form oils, and solid contaminants. Blasting should be performed sufficiently close to the surface so as to open up surface voids, bug holes, air pockets, and other subsurface irregularities, but so as not to expose underlying aggregate.

SSPC-SP8 Pickling

Complete removal of rust and mill scale by acid pickling, duplex pickling or

electrolytic pickling (may reduce the resistance of the surface to corrosion, if not to be primed immediately).

SSPC-SP10 (NACE-2) Near-White Blast Cleaning

Removal of all rust scale, mill scale, previous coating, etc., leaving only light stains from rust, mill scale, and small specks of previous coating. At least 95% of each square inch of surface area is to be free of all visible residues and the remainder shall be limited to slight discoloration.

SSPC-SP11 Power Tool Cleaning to Bare Metal

Complete removal of rust, rust scale, mill scale, foreign matter, and previous coatings, etc., to a standard as specified on a Commercial Grade Blast Cleaning (SSPC-SP6, NACE-3) by means of power tools that will provide the proper degree of cleaning and surface profile.

SSPC-SP12 (NACE-2) Surface Preparation by Water Jetting

Surface preparation of steel and other substrates by ultra-high pressure water jetting.

SSPC-SP13 (NACE-6) Surface Preparation of Concrete

Surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems.

SSPC-SP14 (NACE-8) Industrial Blast Cleaning

Surface preparation standards for industrial blast cleaning allowing for traces of tightly adherent mill scale, rust, & coating residues on 10% of the surface.

SSPC-SP15 Commercial Grade Power Tool Cleaning

Commercial grade power tool cleaning a steel surface to produce a 1.0-mil surface profile. This method of cleaning falls between SP3 & SP11.

7.1.1.2. Visual standards – SSPC-VIS-1 (Swedish SIS OS 5900), “Pictorial Surface Preparation Standards for Painting Steel Surfaces,” and the National Association of Corrosion Engineers, “Blasting Cleaning Visual Standards” TM-01-70 and TM-01-75 shall be considered as standards for proper surface preparation.

7.1.1.3. Visual standards from International Concrete Repair Institute CSP1-9 for degree of roughness and surface profile of concrete.

7.1.2. Oil, grease, soil, dust, etc., deposited on the surface preparation that has been completed shall be removed prior to painting according to SSPC-SP1 Solvent Cleaning.

- 7.1.3. Weld flux, weld spatter and excessive rust scale shall be removed by Power Tool Cleaning as per SSPC-SP11-87T.
- 7.1.4. All weld seams, sharp protrusions, and edges shall be ground smooth prior to surface preparation or application of any coatings.
- 7.1.5. All areas requiring field welding shall be masked off prior to shop coating, unless waived by the Engineer.
- 7.1.6. All areas which require field touch-up after erection, such as welds, burnbacks, and mechanically damaged areas, shall be cleaned by thorough Power Tool as specified in SSPC- SP11-87T.
- 7.1.7. "Touch-up systems will be same as original specification except that approved manufacturer's organic zinc-rich shall be used in lieu of inorganic zinc where this system was originally used. Also strict adherence to manufacturer's complete touch-up recommendations shall be followed. Any questions relative to compatibility of products shall be brought to the Engineer's attention; otherwise, Contractor assumes full responsibility.

8. PRETREATMENTS

- 8.1. When specified, the surface shall be pretreated in accordance with the specified pretreatment prior to application of the prime coat of paint.

9. STORAGE

- 9.1. Materials shall be delivered to the job site in the original packages with seals unbroken and with legible unmutilated labels attached. Packages shall not be opened until they are inspected by the Engineer and required for use. All painting materials shall be stored in a clean, dry, well-ventilated place, protected from sparks, flame, and direct rays of the sun or from excessive heat. Paint susceptible to damage from low temperatures shall be kept in a heated storage space when necessary. The Contractor shall be solely responsible for the protection of the materials stored by him at the job site. Empty coating cans shall be required to be neatly stacked in an areas designated by the Engineer and removed from the job site on a schedule determined by the Engineer. Engineer may request a notarized statement from contractor detailing all materials used on the project.

10. PREPARATION OF MATERIALS

- 10.1. Mechanical mixers, capable of thoroughly mixing the pigment and vehicle together, shall mix the paint prior to use where required by manufacturer's instructions; thorough hand mixing will be allowed for small amounts up to one gallon. Pressure pots shall be equipped with mechanical mixers to keep the pigment in suspension, when required by manufacturer's instructions. Otherwise, intermittent hand mixing shall be done to assure that no separation occurs. All mixing shall be done in accordance with SSPC Vol. 1,

Chapter 4, “Practical Aspects, Use and Application of Paints” and/or with manufacturer’s recommendations.

10.2. Catalysts or thinners shall be as recommended by the manufacturer and shall be added or discarded strictly in accordance with the manufacturer’s instruction.

11. APPLICATION

11.1. Paint shall be applied only on thoroughly dry surfaces and during periods of favorable weather, unless otherwise allowed by the paint manufacturer. Except as provided below, painting shall not be permitted when the atmospheric temperature is below 50° F, or when freshly painted surfaces may be damaged by rain, fog, dust, or condensation, and/or when it can be anticipated that these conditions will prevail during the drying period

11.1.1. No coatings shall be applied unless surface temperature is a minimum of 5° above dew point; temperature must be maintained during curing.

11.1.2. DEW POINT CALCULATION CHART

DEW POINT CALCULATION CHART
Ambient Air Temperature – Fahrenheit

Relative Humidity	20	30	40	50	60	70	80	90	100	110	120
90%	18	28	37	47	57	67	77	87	97	107	117
85%	17	26	36	45	55	65	76	84	95	103	113
80%	16	25	34	44	54	63	73	82	93	102	110
75%	15	24	33	42	52	62	71	80	91	100	108
70%	13	22	31	40	50	60	68	78	88	96	105
65%	12	20	29	38	47	57	66	76	85	93	103
60%	11	20	27	36	45	55	64	73	83	92	101
55%	9	17	25	34	43	53	61	70	80	89	98
50%	6	15	23	31	40	50	59	67	77	86	94
45%	4	13	21	29	37	47	56	64	73	82	91
40%	1	11	18	26	35	43	52	61	69	78	87
35%	-2	8	16	23	31	40	48	57	65	74	83
30%	-6	4	13	20	28	36	44	52	61	69	77

SURFACE TEMPERATURE AT WHICH CONDENSATION OCCURS

Dew Point

Temperature at which moisture will condense on surface. No coatings should be applied unless surface temperature is a minimum of 5° above this point. Temperature must be maintained during curing.

Example

If air temperature is 70° F and relative humidity is 65%, the dew point is 57° F. No coating should be applied unless surface temperature is 62° F minimum.

- 11.1.3. No coatings shall be applied unless the relative humidity is below 85%.
- 11.1.4. Suitable enclosures to permit painting during inclement weather may be used if provisions are made to control atmospheric conditions artificially inside the enclosure, within limits suitable for painting throughout the painting operations.
- 11.1.5. Field Painting in the immediate vicinity of, or on, energized electrical and rotating equipment, and equipment and/or pipes in service shall not be performed without the approval of the Engineer.
- 11.1.6. Extreme care shall be exercised in the painting of all operable equipment, such as valves, electric motors, etc., so that the proper functioning of the equipment will not be affected.
- 11.1.7. The Contractor's scaffolding shall be erected, maintained, and dismantled without damage to structures, machinery, equipment or pipe. Drop cloths shall be used where required to protect buildings and equipment. All surfaces required to be clear for visual observations shall be cleaned immediately after paint application.
- 11.1.8. Painting shall not be performed on insulated pipe within three (3) feet of insulation operations or on insulation whose covering and surface coat have not had time to set and dry. Painting shall not be performed on uninsulated pipe within one (1) foot of any type of connection until the connection has been made, except as directed by the Engineer.
- 11.1.9. The prime coat shall be applied immediately following surface preparation and in no case later than the same working day. All paint shall be applied by brushing, paint mitt and roller, conventional spraying, or airless spraying, using equipment approved by the paint manufacturer.
- 11.1.10. Each coat of paint shall be recoated as per manufacturer's instructions. Paint shall be considered recoatable when an additional coat can be applied without any detrimental film irregularities such as lifting or loss of adhesion.
- 11.1.11. Surfaces that will be inaccessible after assembly shall receive either the full specified paint system or three shop coats of the specified primer before assembly.

11.1.12. Finish colors shall be in accordance with the COLOR SCHEDULE and shall be factory mixed (i.e., there shall be no tinting by the Contractor, unless authorized by the Engineer).

11.1.13. All edges and weld seams in immersion service shall receive a "stripe coat" (applied by brush) of the 1st coat prior to application of the full 1st coat.

11.1.14. All open seams in the roof area of tanks shall be filled after application of the topcoat with a flexible caulking such as Sika Flex 1A.

11.2. WORKMANSHIP

11.2.1. The Contractor must show proof that all employees associated with this project shall have been employed by the Contractor for a period not less than six (6) months.

11.2.2. Painting shall be performed by experienced painters in accordance with the recommendations of the paint manufacturer. All paint shall be uniformly applied without sags, runs, spots, or other blemishes. Work, which shows carelessness, lack of skill, or is defective in the opinion of the Engineer, shall be corrected at the expense of the Contractor.

11.2.3. The Contractor shall provide the names of at least 3 other projects of similar size and scope that they have successfully completed under their current company name.

11.3. APPLICATION OF PAINT

11.3.1. BY BRUSH AND/OR ROLLERS

11.3.1.1. Top quality, properly styled brushes and rollers shall be used. Rollers with a baked phenol core shall be utilized.

11.3.1.2. The brushing or rolling shall be done so that a smooth coat as nearly uniform in thickness as possible is obtained. Brush or roller strokes shall be made to smooth the film without leaving deep or detrimental marks.

11.3.1.3. Surfaces not accessible to brushes or rollers may be painted by spray, by dauber or sheepskins, and paint mitt.

11.3.1.4. It may require 2 coats to achieve the specified dry film thickness if application is by brush and roller.

11.3.2.AIR, AIRLESS, OR HOT SPRAY

11.3.2.1. The equipment used shall be suitable for the intended purpose, shall be capable of properly atomizing the paint to be applied and shall be equipped with suitable pressure regulators and gauges.

11.3.2.2. Paint shall be applied in a uniform layer, with a 50% overlap pattern. All runs and sags should be brushed out immediately or the paint shall be removed and the surface resprayed.

11.3.2.3. High build coatings should be applied by a crosshatch method of spray application to ensure proper film thickness of the coating.

11.3.2.4. Areas inaccessible to spray shall be brushed; if also inaccessible to brush, daubs or sheepskins shall be used, as authorized by the manufacturer.

11.3.2.5. Special care shall be taken with thinners and paint temperatures so that paint of the correct formula reaches the receiving surface.

11.3.2.6. Nozzles, tips, etc., shall be of sizes and designs as recommended by the manufacturer of the paint being sprayed.

11.3.2.7. The first coat on concrete surfaces in immersion service should be sprayed and backrolled.

12. PROTECTION AND CLEAN-UP

12.1. It shall be the responsibility of the Contractor to protect at all times, in areas where painting is being done, floors, materials of other crafts, equipment, vehicles, fixtures, and finished surfaces adjacent to paint work. Cover all electric plates, surface hardware, nameplates, gauge glasses, etc., before start of painting work.

12.2. At the option of the Engineer during the course of this project, the Contractor will contain all spent abrasives, old paint chips, paint overspray and debris by means suitable to the Engineer, including but not limited to, full shrouding of the area.

12.3. If shrouding is required, the Contractor must provide a complete design of the intended shroud or cover. Care must be taken not to modify or damage the structure during the use of the shroud. If damage should occur, the Contractor is held responsible for all repairs.

12.4. At completion of the work, remove all paint where spilled, splashed, splattered, sprayed or smeared on all surfaces, including glass, light fixtures, hardware, equipment, painted, and unpainted surfaces.

12.5. After completion of all painting, the Contractor shall remove from job site all painting equipment, surplus materials, and debris resulting from this work.

12.6. The Contractor is responsible for the removal and proper disposal of all hazardous materials from the jobsite in accordance with Local, State, and Federal requirements as outlined by the Environmental Protection Agency.

12.7. A notarized statement shall be presented to the Engineer that all hazardous materials have been disposed of properly including but not limited to: name of disposal company, disposal site, listing of hazardous materials, weights of all materials, cost per pound and EPA registration number.

13. TOUCH-UP MATERIALS

13.1. The Contractor shall provide at the end of the project at least one (1) gallon of each generic topcoat in each color as specified by the Engineer for future touch-up. Two gallons may be required for (2) component materials.

14. ON-SITE INSPECTION

14.1. During the course of this project the Engineer will reserve the option of incorporating the services of a qualified inspection service. The inspection service will be responsible for assuring the proper execution of this specification by the successful contractor.

15. COATING SYSTEM SCHEDULE

15.1. STEEL – STRUCTURAL, TANKS, PIPES, AND EQUIPMENT

A. EXTERIOR EXPOSURE (NON-IMMERSION)

A.1 System No. 1074U -1 Zinc/Epoxy/Urethane

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
1st Coat: 90-97 Tneme-Zinc	2.5 – 3.5
2nd Coat: N69-Color Hi-Build Epoxoline II	2.0 – 3.0
3rd Coat: 1074U-Endura-Shield	<u>2.0 – 3.0</u> 6.5 – 9.5
	Minimum 7.5 Mils

NOTE: This system is highly resistant to abrasion, wet conditions, corrosive fumes, and chemical contact. Second coat to be same color or close to finish color.

A.2 System No. 1074U-2 High Build Urethane For Marginally Cleaned Surfaces

or

Topcoating Existing Systems.

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning
or SSPC-SP3 Power Tool Cleaning
Feather all edges.

	<u>DFT-Mils</u>
Shop Primer: 135* Chembuild	3.0 – 5.0
Tie Coat: 135* Chembuild	3.0 – 5.0
Topcoat: 1074U-Color Endura-Shield	<u>2.0 – 3.0</u>
	5.0 - 8.0 + SPOTS
Minimum 6.0 Mils	

*Can substitute water-based epoxy Series 27 WB Typoxy @ 4.0 – 5.0 mils DFT.

NOTE: This system can be used over factory finish paint or over non- sandblasted steel and offer the high performance of a urethane coating. A test patch is always recommended to insure proper application.

A.3 System 700-1 Zinc/Urethane/Fluoropolymer (Long Term Color & Gloss Retention)

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
Primer: 90-97 Tneme-Zinc	2.5 – 3.5
2 nd Coat: 73 Endura-Shield	2.0 – 3.0
3 rd Coat: 700 Hydroflon	<u>2.0 – 3.0</u>
	6.5 – 9.5
Minimum 8.0 Mils	

NOTE: This system offers the added corrosion protection of a zinc rich primer. Series 90-97 Tneme-Zinc is an organic zinc-rich primer that can be used for field touch up of a zinc primer or for touch up of galvanized surfaces that are damaged. You can substitute Series 91-H₂O Hydrozinc for the 90-97. You can substitute Series 701 for the Series 700 if a semi-loss finish is desired.

A.4 System 700-2 Fluoropolymer Overcoat System For Steel Tanks With Solvent-Based Coatings

Surface Preparation: Pressure Clean 3000 PSI. Spot SSPC-SP6 Commercial Blast or SSPC-SP3 Power Tool Cleaning. Feather all edges.

	<u>DFT Mils</u>
Spot Primer: 135 Chembuild	3.0 – 5.0
Barrier Coat: 73 Endura-Shield	2.0 – 3.0
Topcoat: 700 Hydroflon	<u>2.0 – 3.0</u>
	4.0 – 6.0 + Spot

NOTE: You can substitute Series 701 for the Series 700 if a semi-gloss finish is desired.

B. INTERIOR EXPOSURE (NON-IMMERSION)

B.1 System No. N69-1 High Solids Epoxy

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	DFT Mils
1 st Coat: N69-Color Hi-Build Epoxoline II	5.0 – 7.0
2 nd Coat: 1074U-Color Endura Shield	<u>2.0 – 3.0</u>
	7.0 – 10.0

Minimum 9.0 Mils

NOTE: This coating will provide maximum protection. It offers chemical and corrosion resistance for long-term protection against salt spray, moisture, corrosive fumes, and chemical attack. Series N69 is a polyamidoamine cured epoxy. Primer coat must be touched-up before 2nd coat is applied.

B.2 System No. N69-6 High Build Epoxy (Over OEM Finishes)

Surface Preparation: Spot SSPC-SP6 Commercial Blast Cleaning or SSPC-SP11 Power Tool Cleaning To Bare Metal

	DFT-Mils
1 st Coat: Manufacturer's Standard (or existing coating)	1.0 – 2.0
2 nd Coat: 135* Chembuild	3.0 – 5.0
3 rd Coat: 1074U-Color Endura Shield	<u>2.0 – 3.0</u>
	5.0 – 8.0

Minimum 7.0 Mils

NOTE: This system is to be used over standard manufacturer's primer to offer a high performance epoxy finish. Excellent for areas of rust not able to be completely cleaned.

*Can substitute water-based epoxy Series 27WB Typoxy @ 4.0 – 6.0 mils DFT.

C. IMMERSION

C.1 System No. N69-2 High Solids High Build Epoxy (Non-Potable Water)

Surface Preparation: SSPC-SP10 Near White Blast Cleaning

	DFT-Mils
Stripe Coat: N69-Color Hi-Build Epoxoline II by brush and roller to all weld Seams and plate edges	3.0 – 5.0

1st Coat:	N69-Color Hi-Build Epoxoline II	6.0 – 8.0
2nd Coat:	N69-Color Hi-Build Epoxoline II	<u>6.0 – 8.0</u>
		15.0 -21.0 (Excluding stripe coat)
Minimum 16.0 MILS		

NOTE: This system provides maximum protection in immersion service. Scarify the surface before topcoating if the Series N69 has been exterior-exposed for 60 days or longer. If primer coat is damaged, it must be touched-up before 2nd coat is applied.

C.2 System No. N140 High Solids Epoxy (Potable Water)

Surface Preparation: SSPC-SP10 Near White Blast Cleaning

		DFT-Mils
	Stripe Coat: N140-15BL Pota-Pox Plus (by brush and roller to all weld seams and plate edges)	3.0 – 5.0
	1st Coat: N140-1255 Pota-Pox Plus (Beige)	6.0 – 8.0
	2nd Coat: N140-15BL Pota-Pox Plus (Tank White)	<u>6.0 – 8.0</u>
		12.0 -16.0 (Excluding stripe coat)
Minimum 16.0 MILS		

NOTE: Series N140 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61.

C.3 System No. 46-30 Coal Tar-Epoxy (Non-Potable Water)

Surface Preparation: SSPC-SP10 Near White Blast Cleaning

	DFT-Mils
One Coat: 46H-413 Hi-Build Tneme-Tar	16.0 – 20.0

NOTE: May be applied in a two-coat application. Review critical recoat time if utilized.

C.4 System No. 91-H₂O Zinc/Epoxy (Potable Water)

Surface Preparation: SSPC-SP10 Near White Metal Blast

	DFT-Mils
Stripe Coat: 91-H ₂ O Hydrozinc 2000 (by brush & roller to all weld seams and plate edges.)	2.5 – 3.5
1st Coat: 91- H ₂ O Hydrozinc 2000	2.5 – 3.5
2nd Coat: N140-1255 Pota-Pox Plus (Beige)	4.0 – 6.0
3rd Coat: N140-15BL Pota-Pox Plus (Tank	<u>4.0 – 6.0</u>

White)

10.5 -15.5

Minimum 12.0 Mils

Caulk: Seal all open roof seems with a flexible NSF Certified caulking such as Sika-Flex 1A.

NOTE: Meets AWWA D102-97 Inside Coating System No.3

C.5 System 406-1 Elastomeric Polyurethane

Surface Preparation: SSPC-SP10 Near White Metal Blast

Primer: 1 Omnithane
Topcoat: 406 Elasto-Shield

DFT-Mils
2.5 – 3.5
75 –100
82.5-103.5

Minimum 80 Mils

15.2. OVERHEAD METAL DECKING, JOIST

D. INTERIOR EXPOSURE

D.1 System No. 115-1 Uni-Bond DF

Surface Preparation: Surfaces must be dry, clean, and free of oil, grease, and other contaminants. Allow concrete to cure 28 days. Galvanized metal decking must be scarified.

Coating: 115-Color Uni-Bond DF

DFT-Mils
2.0 – 4.0

NOTE: This system should be used on ceiling areas where a one-coat system is desired. Can be applied over steel, galvanized, and aluminum decking, joist,beams, conduits, and concrete.

E. EXTERIOR EXPOSURE

E.1 System No. 27WB Epoxy/DTM Acrylic

Surface Preparation: Pressure clean to remove all dirt, oil, grease, chemicals, and foreign contaminants. Remove loose paint and all rust by hand and power tool cleaning (SSPC-SP 2 & 3). Feather all edges.

Spot Primer: 27WB Typoxy
1st Coat: 30 Spra-Saf EN
2nd Coat: 30 Spra-Saf EN

DFT-Mils
3.0 – 5.0
2.0 – 4.0
2.0 – 4.0
4.0 – 8.0 (For (2) Coats)

NOTE: This system can be applied over a wide variety of coatings and factory finishes. It can also be applied direct to galvanized aluminum decking, joists, conduits, and tight rust.

15.3. MILL COATED STEEL PIPE

F. EXTERIOR/INTERIOR EXPOSURE (NON-IMMERSION)

F.1 System No. N69-3 Epoxy-Polyamide

Surface Preparation: Remove the black mill coating by abrasive blast cleaning per SSPC-SP6. Do not overblast the steel.

	DFT-Mils
1st Coat: N69-Color Hi-Build Epoxoline II	6.0 – 8.0
2nd Coat: 1074U Endura-Shield	<u>2.0 – 3.0</u>
	8.0–11.0
Minimum 10.0 Mils	

15.4. GALVANIZED STEEL – PIPE AND MISCELLANEOUS FABRICATIONS

G. EXTERIOR/ (NON-IMMERSION)

G.1 System No. 1074U-2 Epoxy/High Build Urethane

Surface Preparation: SSPC-SP1 Solvent Cleaning and Scarify by Brush Off Blasting, Hand Sanding, or Chemical Treatment

	DFT-Mils
1st Coat: N69-Color Hi-Build Epoxoline II	2.0 – 4.0
2nd Coat: 1074U-Color Endura-Shield	<u>2.0 – 3.0</u>
	4.0 – 7.0
Minimum 6.0 Mils	

NOTE: Series N69 has excellent adhesion to galvanized steel. This system is highly resistant to abrasion, wet conditions, corrosive fumes, and chemical contact. First coat to be same color as or close to the finish color.

H. INTERIOR EXPOSURE (NON IMMERSION)

H.1 System No. N69-6 Polyamide Epoxy

Surface Preparation: SSPC-SP1 Solvent Cleaning and Scarify by Brush Off Blasting, Hand Sanding, or Chemical Treatment.

DFT-Mils

1st Coat: N69-Color Hi-Build Epoxoline II	2.0 – 4.0
2nd Coat: 1074U-Color Endura Shield	<u>2.0 – 3.0</u>
	4.0 – 7.0

Minimum 6.0 Mils

I. IMMERSION (POTABLE WATER)

I.1 System No. N140-1 Epoxy-Polyamide (Potable Water)

Surface Preparation: Solvent Clean Per SSPC-SP1 & Abrasive Blast per SSPC-SP7

	DFT-Mils
1st Coat: N140-1255 Pota-Pox Plus Primer	4.0 – 6.0
2nd Coat: N140-15BL Pota-Pox Plus Finish	<u>4.0 – 6.0</u>
	8.0–12.0

Minimum 10.0 Mils

NOTE: Series N140 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61.

15.5. WASTEWATER EQUIPMENT IN IMMERSION SERVICE SUCH AS RAKE ARMS, ETC.

J. STEEL IN WASTEWATER IMMERSION

J.1 System No. 446-1 Perma-Shield MCU

Surface Preparation: SSPC-SP10 (Near White Metal Blast)

	DFT-Mils
Primer: 1 Omnithane	2.5 – 3.5
1st Topcoat: 446 Perma-Shield MCU	5.0–10.0
2nd Topcoat: 446 Perma-Shield MCU	<u>5.0–10.0</u>
	12.5 –23.5

Minimum 15.0 Mils

NOTE: This system offers fast cure for immersion service (4 hours ± @ 75°F)

NOTE: Substitute Series 1074U for 2nd topcoat of Series 446 for areas not in immersion service and exposed to the sun, such as walkways, platforms, handrails, etc.

15.6. CONCRETE

K. EXTERIOR – ABOVE GRADE

K.1 System No. 6-1 Acrylic Emulsion

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 6-Color Tneme-Cryl	2.0 – 3.0
2nd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	4.0 – 6.0
Minimum 5.0 Mils	

NOTE: If semi-gloss finish is desired, use Series 1029 Enduratone as the 2nd coat @ 2.0 – 3.0 mils DFT.

K.2 System No. 156-1 Modified Acrylic Elastomer

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 156-Color Enviro-Crete	4.0 – 8.0
2nd Coat: 156-Color Enviro-Crete	<u>4.0 – 8.0</u>
	8.0 –16.0
Minimum 10.0 Mils	

NOTE: If texture is needed, use 157 Enviro-Crete TX (medium texture). For application over previously applied coatings, use TNEMEC Series 151 Elasto-Grip at 1.0 – 2.5 mils DFT prior to the application of Series 156 Enviro-Crete.

K.3 System No. 100 Concrete Stain

Surface Preparation: The surface must be clean, dry, sound, free of cracks, and paint.

	SF/Gal/Ct*
Sealer: Chemprobe Prime A Pell H ₂ O	65-200
Concrete Stain: Two coats of Chemprobe	75-200
Conformal Stain	

*Coverage rates depend on substrate.

L. EXTERIOR – BELOW GRADE

L.1 System No. 46-31 Coal Tar Epoxy

Surface Preparation: Surface shall be clean and dry. Allow New concrete to cure at least 28 days.

	DFT-Mils
One Coat: 46H-413 Hi-Build Tneme-Tar	14.0-20.0

L.2 System No. 100-1 Crystalline Waterproofing

Surface Preparation: Surface to be clean and opened up by Brush Blasting, Acid Etching, or Water Blasting w/Turbo Tips. Surface must be pre-wetted prior to application.

1st Coat: XYPEX Concentrate @ (1.5 #/SY)
2nd Coat: XYPEX Modified @ (1.5 #/SY)

NOTE: This system can be applied to concrete that is still wet or hasn't developed final cure. It can be used where wet surface conditions exist or where there is the potential for water intrusion due to hydrostatic pressure. Application shall be per XYPEX specification manual.

M. INTERIOR EXPOSURE (NON-IMMERSION)

M.1 System No. 6-1 Acrylic Emulsion (Interior/Exterior)

Surface Preparation: Surface shall be clean and dry. Allow concrete to cure for 28 days.

	DFT-Mils
1st Coat: 6-Color Tneme-Cryl	2.0 – 3.0
2nd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	4.0 – 6.0

Minimum 5.0 Mils

NOTE: This system will provide a decorative coating with good exterior durability, color retention, and a high vapor transmission rate. For Semi-Gloss finish, substitute Series 1029 Enduratone for the 2nd coat at 1.5 – 2.0 mils DFT. Apply both the Series 6 & 1029 in the same color.

M.2 System No. N69-4 Epoxy-Polyamidoamine (Interior)

Surface Preparation: Surfaces shall be clean and dry. Allow concrete to cure for 28 days.

	DFT-Mils
1st Coat: N69-Color Hi-Build Epoxoline II	4.0 – 6.0
2nd Coat: N69-Color Hi-Build Epoxoline II	<u>4.0 – 6.0</u>
	8.0–12.0

Minimum 10.0 Mils

M.3 System No. 113-2 Acrylic Epoxy Semi-Gloss

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 113-Color Tneme-Tufcoat	4.0 – 6.0

2nd Coat: 113-Color Tneme-Tufcoat	<u>4.0 – 6.0</u> 8.0 –12.0
Minimum 8.0 Mils	

NOTE: Substitute Series 114 Tneme-Tufcoat for gloss finish. Multiple coats may be required if application is by roller.

N. IMMERSION – POTABLE & NON-POTABLE WATER

N.1 System No. N69-4 Epoxy-Polyamidoamine (Non-Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13 with a CSP5 or better finish.

	DFT-Mils
Surfacer: 218 MortarClad	1/16"±
1st Coat: N69-Color Hi-Build Epoxoline II	4.0 – 6.0
2nd Coat: N69-Color Hi-Build Epoxoline II	<u>4.0 – 6.0</u>
	8.0 –12.0 + Surfacer
Minimum 10.0 Mils + Surfacer	

NOTE: First coat should be spray applied and backrolled.

N.2 System No. 104-5 High Solids Epoxy (Non-Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13 with a CSP5 or better finish.

	DFT-Mils
Surfacer: 218 MortarClad	1/16"±
1st Coat: 104-1255 H.S. Epoxy	6.0 – 10.0
2nd Coat: 104-Color H.S. Epoxy	<u>6.0 – 10.0</u>
	12.0 - 20.0 + Surfacer
Minimum 14.0 Mils + Surfacer	

NOTE: First coat should be spray applied and backrolled.

N.3 System No. 46-31 Coal Tar-Epoxy (Non-Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

	DFT-Mils
One Coat: 46H-413 Hi-Build Tneme-Tar	14.0 – 20.0

NOTE: May be applied in a two-coat application. Review critical recoat time if utilized. Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with Tnemec Series 215 Surfacing Coat as required.

N.4 System No. N140-2 Epoxy-Polyamidoamine (Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13 with a CSP5 or better finish.

	DFT-Mils
Surfacer: 218 MortarClad	1/16"±
1st Coat: N140-1255 Pota-Pox Plus	6.0 – 8.0
2nd Coat: N140-15BL Pota-Pox Plus	<u>6.0 – 8.0</u>
	12.0-16.0 + Surfacer
Minimum 14.0 Mils + Surfacer	

NOTE: Series N140 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61. Any remaining voids after the 1st coat should be filled as required with TNEMEC Series 215 Surfacing Epoxy.

N.5 System No. 264-1 Elastomeric Polyurethane (Black) (Potable Water)

Surface Preparation: Surfaces shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13 (Surface Preparation of Concrete) with a CSP5 or better profile.

	DFT-Mils
Surfacer: 218 MortarClad	1/16"±
Primer: N140-15BL Pota Pox Plus (Tank White)	5.0 Mils
Coating: 264 Elasto-Shield	<u>60.0 Mils ±</u>
	65.0 Mils + Surfacer

NOTE: This system is NSF Certified for Potable Water. This flexible liner can be used to rehab tanks with leaks. Multiple passes may be required to achieve the desired thickness that can range from 50-100 mils. See Elasto-Shield Application Guide for detailed instructions. Substitute Series 262 Elasto-Shield for non-potable water applications.

N.6 System 406-2 (Elastomeric Polyurethane Hybrid)

Surface Preparation: Surfaces shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13 (Surface Preparation of Concrete) with a CSP5 or better profile.

	DFT-Mils
Surfacer: 218 Mortarclad	1/16"±
Primer: 1 Omnithane	2.5 – 3.5
Topcoat: 406 Elasto-Shield	<u>60 – 75</u>
	60.2-78.5+ Surface

Minimum 65 Mils

NOTE: This system is NSF Certified for contact with potable water.

O. INTERIOR EXPOSURE (NON-IMMERSION) OVER EXISTING COATINGS

O.1 System No. 6-1 Acrylic Emulsion

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 6-Color Tneme-Cryl	2.0 – 3.0
2nd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	4.0 – 6.0

Minimum 5.0 Mils

NOTE: If semi-gloss finish is desired, use Series 1029 Enduratone as the 2nd Coat @ 1.5 – 2.0 mils DFT.

O.2 System No. 113-1 Acrylic-Epoxy Semi-Gloss

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 113-Color Tneme-Tufcoat	2.0 – 3.0
2nd Coat: 113-Color Tneme-Tufcoat	<u>2.0 – 3.0</u>
	4.0 – 6.0
Minimum 5.0 Mils	

NOTE: This system will provide high performance and can be applied directly over existing coatings without lifting. Can be used when low odor is required during application. Specify Series 114 Tneme-Tufcoat for Gloss Finish. This coating can be spray applied in a single coat at 4.0 – 6.0 mils DFT.

15.7. CONCRETE FLOORS

P. EPOXY FLOOR COATING

P.1 System No. 205-1 Epoxy-Polyamide

Surface Preparation: Allow concrete to cure 28 days. Acid Etch or Brush Off Blast Cleaning per SSPC-SP13.

	DFT-Mils
1st Coat: 205 Terra-Tread FC	3.0 – 5.0
2nd Coat: 205 Terra-Tread FC	<u>3.0 – 5.0</u>
	6.0–10.0
Minimum 6.0 Mils	

NOTE: This system will provide a durable, longwearing coating that bonds tightly to concrete and stands up under heavy foot traffic, frequent cleaning, and spillage of water, oil, grease, or chemical. For floors exposed to the sun, add a 3rd coat of Tnemec Series 290 CRU at 2.0 – 3.0 mils DFT.

NOTE: For a skid resistant finish broadcast 50 mesh dry washed silica sand into the 1st coat.

P.2 System No. 287-1 Waterborne Epoxy-Amine

Surface Preparation: Allow concrete to cure 28 days. Acid Etch or Brush Off Blast Cleaning per SSPC-SP13.

	DFT-Mils
1st Coat: 287-Color Enviro-Pox	2.0 – 4.0
2nd Coat: 287-Color Enviro-Pox	<u>2.0 – 4.0</u>
	4.0 – 8.0

Minimum 5.0 Mils

NOTE: For a non-skid finish, add 287-300C skid resistance sand into the first coat. For floors exposed to the sun add a 3rd coat of Tnemec Series 290-CRU at 2.0 – 3.0 mils DFT.

P.3 System No. 280-1 High Build Polyamine-Epoxy Glaze Floor

Surface Preparation: Allow concrete to cure 28 days. Abrasive Blast Cleaning (Refer to Installation Guide of manufacturer.)

	DFT-Mils
1st Coat: 201 Epoxoprime	6.0 – 8.0
2nd Coat: 280 Tneme-Glaze	6.0 – 8.0
3rd Coat: 280 Tneme-Glaze	<u>6.0 – 8.0</u>
	18.0 –24.0

Minimum 18 Mils

Please refer to manufacturer’s Installation Guide and Technical Data for proper installation. For floors exposed to the sun add a coat of 290 @ 2.0 – 3.0 mils DFT.

P.4 System No. 237/280 Solid Color Double Broadcast Flooring (Non-Slip)

Surface Preparation: Abrasive Blast Cleaning (Refer to Installation Guide of manufacturer.)

	DFT-Mils
1st Coat: 237 Power-Tread	1/8" (2 cts. @ 1/16" each)
2nd Coat: 280 Tneme-Glaze	8.0 –12.0
Minimum 1/8"±	

Please refer to manufacturer’s Installation Guide and Technical Data for proper installation. Optional 4th coat of Series 290 CRU at 2.0 – 3.0 mils DFT for floors exposed to the sun.

P.5 System No. 222/284 Multi-Color Quartz Broadcast Floor and Cove Base

Surface Preparation: Abrasive blast cleaning (Refer to Tnemec Surface Preparation and Installation Guide).

	DFT-Mils
1st Coat: 222 Deco-Tread	1/8" (2 cts. @ 1/16" each)
2nd Coat: 284 Deco-Clear	<u>8.0-10.0</u>
	Total 1/8" +

Please refer to manufacturer’s Installation Guide and Technical Data for proper installation. Optional 4th coat of Series 295 CRU at 2.0 – 3.0 mils DFT for floors exposed to the sun.

15.8. **POROUS MASONRY (BLOCK)**

Q. EXTERIOR/INTERIOR EXPOSURE

Q.1 System No. 6-2 Acrylic Emulsion, Low Sheen

Surface Preparation: Surface shall be clean and dry.

	DFT-Mils
Block Filler: 54 Surface Coat	100± SF Gal
1st Coat: 6-Color Tneme-Cryl	2.0 – 3.0
2nd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	*4.0 – 6.0

*Total dry film thickness of topcoats only.

NOTE: This system will fill the block and provide a sealed surface. For semi-gloss finish, use Series 1029 Enduratone (SG) for the 2nd coat @ 2.0 – 3.0 mils DFT.

Q.2 System No. N69-15 Epoxy-Polyamide (Interior)

Surface Preparation: Surface shall be clean and dry.

	DFT-Mils
Block Filler: 1254WB Surface Coat	120± SF Gal
1st Coat: N69-Color Hi-Build Epoxoline II	4.0 – 6.0
2nd Coat: N69-Color Hi-Build Epoxoline II	<u>4.0 – 6.0</u>
	*8.0–12.0

*Total dry film thickness of topcoats only.

NOTE: Block filler is a water-based epoxy.

Q.3 System No. 104-6 High Solids Epoxy (Interior Only)

Surface Preparation: Surface to be clean and dry.

	DFT-Mils
1st Coat: 104-Color H.S. Epoxy	6.0 – 10.0
2nd Coat: 104-Color H.S. Epoxy	<u>6.0 – 10.0</u>
	12.0 – 20.0

Minimum 14.0 Mils

NOTE: The surface will be tile-like for easy cleaning and will provide protection against chemical attack, corrosive fumes, high humidity and wash down. Spray and backroll first coat to fill porosity.

Q.4 System No. 113-1 Acrylic-Epoxy Semi-Gloss (Interior Only)

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
Block Filler: 54 Surface Coat	100± SF Gal
1st Coat: 113-Color Tneme-Tufcoat	4.0 – 6.0
2nd Coat: 113-Color Tneme-Tufcoat	<u>4.0 – 6.0</u>

8.0-12.0

NOTE: Series 113 can be spray applied @ 4.0 – 6.0 mils DFT. Application by brush and roller fill require additional coats.

NOTE: Series 113 Tneme-Tufcoat has very low odor and can be used when painting in occupied areas. Specify Series 114 Tneme-Tufcoat for a gloss finish.

Q.5 System No. 156-1 Modified Acrylic Elastomer (Exterior)

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
Block Filler: 54 Surface Coat	100± SF Gal
1st Coat: 156-Color Enviro-Crete	4.0 – 8.0
2nd Coat: 156-Color Enviro-Crete	<u>4.0 – 8.0</u>
	8.0–16.0
Minimum 10.0 Mils (For 2nd & 3rd Coats)	

NOTE: If texture is needed, use 157 Enviro-Crete TX (medium texture). For application over previously applied coatings, use TNEMEC 151 Elasto-Grip at 1.0 – 2.5 mils DFT in place of the 54WB Surface Coat.

15.9. **GYPSUM WALLBOARD**

R. INTERIOR EXPOSURE

R.1 System No. 113-5 Acrylic-Epoxy

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 51 PVA Sealer	1.0 – 1.5
2nd Coat: 113 H.B. Tneme-Tufcoat	2.0 – 3.0
3rd Coat: 113 H.B. Tneme-Tufcoat	<u>2.0 – 3.0</u>
	5.0 – 7.0
Minimum 6.0 Mils	

NOTE: Series 113 can be spray applied in a single coat at 4.0 – 6.0 mils DFT. Substitute Series 114 if a gloss finish is desired.

R.2 System No. N69-22 Hi-Build Epoxoline

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 151 Elasto-Grip	0.7 – 1.5
2nd Coat: N69-Color Hi-Build Epoxoline II*	<u>4.0 – 6.0</u>
	4.7 - 7.5
Minimum 5.0 Mils +	

NOTE: *Two coats may be required if applied by roller.

R.3 System No. 6-1 Acrylic Emulsion, Low Sheen (Interior Exposure)

Surface Preparation: Surface must be clean and dry.

	DFT-Mils
1st Coat: 6-Color Tneme-Cryl	2.0 – 3.0
2nd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	4.0 – 6.0
Minimum 5.0 Mils	

NOTE: This system is designed for mild use areas like office walls, laboratory ceilings, stairwells, etc. For semi-gloss finish, use Series 1029 Enduratone at 2.0 – 3.0 mils DFT for the topcoat.

15.10. **WOOD**

S. EXTERIOR/INTERIOR EXPOSURE

S.1 System No. 2H-4 Alkyd (Gloss)

Surface Preparation: Surface shall be clean and dry.

	DFT-Mils
1st Coat: 10-99W Tnemec Primer	2.0 – 3.5
2nd Coat: 2H Hi-Build Tneme-Gloss	1.5 – 3.5
3rd Coat: 2H Hi-Build Tneme-Gloss	<u>1.5 – 3.5</u>
	5.0–10.5
Minimum 6.0 Mils	

S.2 System No. 6-5 Acrylic Latex (Flat)

Surface Preparation: Surface shall be clean and dry.

	DFT-Mils
1st Coat: 10-99W Tnemec Primer	2.0 – 3.5
2nd Coat: 6-Color Tneme-Cryl	2.0 – 3.0
3rd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	6.0 – 9.5
Minimum 7.5 Mils	

NOTE: Substitute Series 1029 Enduratone for the third coat at 1.5 – 2.0 mils DFT if semi-gloss finish is desired.

15.11. **PVC PIPE**

T. EXTERIOR OR INTERIOR

T.1 System No. 73-23 Epoxy-Polyamide

Surface Preparation: Solvent clean per SSPC-SP1 & Scarify by Brush Blast or Hand Sanding.

	DFT-Mils
1st Coat: N69-Color Hi-Build Epoxoline II	2.0 – 3.0
2nd Coat: 1074U Endura-Shield	<u>2.0 – 3.0</u>
	4.0 – 6.0
Minimum 5.0 Mils	

15.12. INSULATED PIPE

U. INTERIOR EXPOSURE

U.1 System No. 6-1 Acrylic Emulsion, Low Sheen

Surface Preparation: Surface shall be clean and dry.

	DFT-Mils
1st Coat: 6-Color Tneme-Cryl	2.0 – 3.0
2nd Coat: 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
	4.0 – 6.0
Minimum 5.0 Mils	

NOTE: For semi-gloss finish, use Series 1029 Enduratone for the 2nd coat.

15.13. HIGH HEAT COATING

V. EXTERIOR/INTERIOR EXPOSURE

V.1 System No. 90E-92 Inorganic Zinc (750°F Max)

Surface Preparation: SSPC-SP10 Near White Metal Blast Cleaning

	DFT-Mils
Coating: 90E-02 Tneme-Zinc	2.0 – 3.5

NOTE: Coating will have a greenish gray color but will not require curing at elevated temperatures.

15.14. **SURFACES EXPOSED TO H2S/H2SO4 (SEVERE EXPOSURE/IMMERSION)**

W. CEMENTITIOUS SURFACES

W.1 System No. 446-2 Perma-Shield MCU (Concrete)

Surface Preparation: Abrasive blast clean per SSPC-SP13 to remove all laitance, fines, and contamination with a minimum surface profile of CSP5.

	DFT-Mils
Surfacer: 218 Mortarclad	1/16" - 1/8"*
1st Coat: 446 Perma-Shield MCU	5.0 – 10.0
2nd Coat: 446 Perma-Shield MCU	<u>5.0 – 10.0</u>
	10.0 - 20.0 + Surfacer
Minimum 14.0 Mils + Surfacer	

NOTE: *Surfacer needs to be applied by trowel or sprayed and back trowelled.

W.2 System 436-1 Perma-Shield FR (Concrete)

Surface Preparation: Abrasive blast clean per SSPC-SP13 to remove all laitance, fines, and contamination with a minimum surface profile of CSP5.

	DFT-Mils
1st Coat: 218 Mortarclad	1/16" - 1/8"*
2nd Coat: 436 Perma-Shield FR	<u>60 – 100</u>
	60 – 100 + Surfacer

NOTE: *First coat to be applied by trowel or sprayed and back trowelled. For severe H₂S exposure apply 436 @ 100-125 mils DFT.

X. FERROUS METAL SURFACES

X.1 System No. 435-2 Perma-Glaze

Surface Preparation: SSPC-SP5 White Metal Blast Cleaning (3.0 Mil Profile)

	DFT-Mils
1st Coat: 435 Perma-Glaze	15.0 – 20.0
2nd Coat: 435 Perma-Glaze	<u>15.0 – 20.0</u>
	30.0 – 40.0
Minimum 35.0 Mils	

NOTE: Application of a stripe coat to all weld seams and plate edges is

recommended. Can be applied in a single sprayed coat @ 30-40 mils DFT.

15.15. EXTERIOR OF PRESTRESSED CONCRETE TANKS

Z.1 System No. 156-3 (New Tanks)

Surface Preparation: Surface to be clean and dry.

	DFT-Mils
1st Coat: 156-Color Enviro-Crete	4.0 – 6.0
2nd Coat: 156-Color Enviro-Crete	<u>4.0 – 6.0</u>
	8.0–12.0

Minimum 10.0 Mils

Z.2 System No. 156-4 Existing Tanks (Previously Painted)

Surface Preparation: Remove all dirt, oil, grease, chalk, and loose paint per High Pressure Water Blast (Min 3500 PSI).

	DFT-Mils
1st Coat: 151 Elasto-Grip	1.0 – 2.5
Stripe Coat: Stripe all hairline cracks with a Brushed coat of 156 Enviro-Crete	3.0 – 5.0
Spot Coat: 156 Enviro-Crete	4.0 – 6.0
Topcoat: 156 Enviro-Crete	6.0 – 8.0
(Cracks)	10.0–15.5
(Other)	7.0 –10.5

1st coat is optional and can be eliminated with approval from coatings manufacturer.
Spot coat of Series 156 for areas of bare concrete.

15.16. SECONDARY CONTAINMENT AREAS

AA.1 System No. 61-4 Epoxy Polyamide (For Fuel Oils)

Surface Preparation: Surface shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive Blast Clean per SSPC-SP13 with a CSP5 or better finish.

	DFT-Mils
Surfacer: 218 MortarClad (Vertical Surfaces)	1/16"
Primer: 61-5002 Tneme-Liner (Beige)	10.0 – 12.0
Topcoat: 61-5001 Tneme-Liner (Gray)	<u>10.0 – 12.0</u>
	20.0 – 24.0

Minimum 20.0 Mils

NOTE: This system will provide excellent resistance to most chemicals including

petrochemicals. Use Tnemec Series 215 Surfacing Epoxy between coats as a filler and surfacer wherever it is required.

AA.2 System 262-1 Flexible Polyurethane

Surface Preparation: Surfaces shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive Blast Clean per SSPC-SP7 (Brush Off Blast).

	DFT-Mils
Surfacer: 218 MortarClad (Vertical Surfaces)	1/16"±
Primer: N69 Hi-Build Epoxoline II	5.0 Mils
Coating: 262 Elasto-Shield (Black)	<u>60.0 Mils</u>
Total 65.0 Mils	

NOTE: Multiple passes may be required to achieve recommended film thickness. See Elasto-Shield Application Guide for additional instructions. This product is only available in black. Repair all cracks, bugholes, and spalled areas with Series 265 Elasto-Shield TG prior to application of Series 262.

AA.3 System No. 275 Fiber Reinforced Novolac Epoxy (For Acids & Caustics)

Surface Preparation: Allow new concrete to cure 28 days. Abrasive blast clean per SSPC-P13. Test for moisture and moisture vapor transmission.

Filler Surfacer For Vertical Surfaces: 218 MortarClad @ 1/16".

Prime Coat: Tnemec Series 201 Epoxoprime* @ 6.0 – 8.0 mils DFT.

Body Coat: Tnemec Series 270 Stranlok (Fiber Reinforced Epoxy) applied by spray or trowel at 30-35 mils DFT.

Topcoat: Tnemec Series 282 Tneme-Glaze (Novolac Epoxy) applied at 6.0 – 10.0 mils DFT.

*Substitute Koesters VAP 1 2000 if moisture transmission exceeds 3# per 1000 SF in 24 hours for horizontal surfaces.

15.17. **CLEAR WATER REPELLENT FOR CONCRETE, MASONRY & BRICK**

BB.1 Silane/Siloxane Sealer (Water Based)

Surface Preparation: Allow new concrete to cure 28 days. Clean surfaces to be sealed by abrasive blasting or waterblasting.

COATING: BRICK, CONCRETE

Chemprobe PRIME A PELL H₂O 125-200 SF/GAL

SPLIT FACED OR POROUS MASONRY

Chemprobe PRIME A PELL H₂O. 65-100 SF/GAL

BB.2 Silane/Siloxane Sealer w/Concrete Stain

Sealer: Chemprobe Prime A Pell H₂O 65-200 SF/Gal

Concrete Stain: Two Coats of Chemprobe 75-200 SF/Gal/Ct Conformal Stain

BB.3 RTV Silicone Rubber Water Repellent And Graffiti Protectorant

1st Coat: 626 Dur A Pell GS 75-300 SF/Gal*

2nd Coat: 626 Dur A Pell GS 75-300 SF/Gal*

*Depends on substrate.

**Use 680 Mark A Way for graffiti removal.

15.18. **MANHOLES, WET WELLS, LIFT STATIONS, AND HEADWORKS AREAS**

CC.1 System No. 434-3 Perma-Shield (Epoxy Mortar)

Surface Preparation: Abrasive blast clean per SSPC-SP13 with a CSP5 or better profile.

	DFT-Mils
Surfacer: 218 MortarClad	1/16" - 1/8"
Mortar: 434 Perma-Shield	1/8"
Glaze Coat: 435 Perma-Glaze	<u>15.0 – 20.0</u>
	3/16"±

*Surfacer & mortar coats to be applied by trowel or sprayed and back trowelled.

**All surface voids, cracks, pinholes, and other defects must be filled flush with the adjacent surfaces by putty knife, trowel, float, squeegee, or other suitable method.

CC.2 System No. 100-1 Crystalline Waterproofing

Surface Preparation: Surface to be clean and roughened by Brush Blasting, Acid Etching, or High Pressure Water Blasting (3500 PSI) with turbo tips.

1st Coat: XYPEX Concentrate @ (1.5#/SY) – 1/16"±

2nd Coat: XYPEX Modified @ (1.5#/SY) – 1/16"±

NOTE: This system can be applied to concrete that is still wet or hasn't developed final cure. It can be used where wet surface conditions exist or where there is the potential for water intrusion due to hydrostatic pressure. Where rapid return to service is required use Mega Mix I instead of Modified.

15.19. **CANAL PIPE CROSSINGS AND BACK FLOW PREVENTORS**

DD.1 System 700-2 Zinc/Epoxy/Flouropolymer for New Pipe or Pipe Requiring Removal of Existing Coatings

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	DFT-Mils
Primer: 90-97 Tneme-Zinc	2.5 – 3.5
2nd Coat: 73- Endura-Shield	2.0 – 3.0
3rd Coat: 700 Hydroflon	<u>2.0 – 3.0</u>
	6.5 – 9.5

Minimum 8.0 Mils

Substitute Series 701 for a semi-gloss finish.

DD.2 System No. 27WB-2 High Build, High Gloss Urethane for Marginally Cleaned Surfaces or Topcoating Over Existing Systems

Surface Preparation: High Pressure Water Blast (Min 3500 PSI) or Solvent Clean (SSPC-SP1) and Spot Hand and Power Tool Clean (SSPC-SP2 & 3) or Brush Blast (SSPC-SP7). Existing coatings must be clean, dry, and tightly adhering prior to application of coatings.

	DFT-Mils
Spot Primer: 27WB Typoxy	3.0 – 5.0
Tie Coat: 27WB Typoxy	3.0 – 5.0
2nd Coat: 700 Hydroflon	<u>2.0 – 3.0</u>
	5.0 – 8.0

Minimum 6.0 Mils

NOTE: A test Patch is always recommended to insure proper adhesion to existing coatings without lifting of existing coatings. Substitute Series 701 for a semi-gloss finish.

15.20. **REPAINTING OF METAL BUILDING PANELS**

EE.1 Exterior of Metal Building Panels

Surface Preparation: Pressure clean (3000 PSI) and spot SP2 & 3 Hand and Power Tool Cleaning.

	DFT-Mils
Spot Primer: 135* Chembuild	3.0 – 5.0
1st Coat: 30 Spra-Saf EN	2.0 – 4.0
2nd Coat: 30 Spra-Saf EN	<u>2.0 – 4.0</u>
	4.0 – 8.0

Minimum 4.0 Mils

NOTE: Test patch is strongly recommended.

*Can substitute water based epoxy Series 27WB Typoxy @ 4.0 – 6.0 mils DFT.

EE.2 Exterior Miscellaneous Metal Trim

Surface Preparation: Pressure clean (3000 PSI) or solvent clean per SSPC-SP1.
Spot SP2 & 3 Hand & Power Tool Cleaning.

	DFT-Mils
Spot Primer: 135* Chembuild	2.0 – 4.0
Tie Coat: 135* Chembuild	2.0 – 4.0
Topcoat: 1074U Endura-Shield	<u>2.0 – 3.0</u>
Total	4.0 – 7.0

NOTE: Test patch is strongly recommended.

*Can substitute water based epoxy Series 27WB Typoxy @ 4.0 – 6.0 mils DFT.

16. GENERAL STATEMENT

16.1. Manufacturer’s Technical Data Sheets, Installation Instructions and Label Directions are considered to be part of this specification.

16.2. Systems not applicable to this project should be deleted.

16.3. Consult TNEMEC for additional systems needed to address surfaces not included within these specifications.

16.4. For additional technical support, product availability, and pricing information, please contact:

FLORIDA PROTECTIVE COATINGS CONSULTANTS, INC.
TNEMEC, INC.
250 Waymont Ct. Suite 120
Lake Mary, FL 32746
Telephone: (407) 322-1243
Fax: (407) 322-1245
e-mail: mstensrud@tnemec.com
MICHAEL R. STENSRUD
GEORGE SMITH
BILL LANGER
BLAKE HOLMES

16.5. WARRANTY - If within one year after the date of completion of each facility component, any Work found to be defective, painting CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER’S written instructions, either correct such defective work, or, if it has been rejected by OWNER, remove it from the site and replace it with non-defective work. If painting CONTRACTOR does not promptly comply with terms of such instructions, or in an emergency where delay would cause serious risk of loss or

damage, OWNER may have the defective work corrected or the rejected work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, will be charge to the painting CONTARACTOR.

17. COATING SCHEDULE

	STRUCTURE	SURFACE	EXPOSURE	COATING SYSTEM	FINISH COLOR
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Attach a Pipe Schedule if necessary to identify pipe colors.

SYSTEMS REFERENCE GUIDE

15.1 STEEL – STRUCTURAL, TANKS, PIPES, AND EQUIPMENT

A. – EXTERIOR EXPOSURE (NON-IMMERSION)

- A.1 System No. 1074U-1 Epoxy/High Build Urethane
- A.2 System No. 1074U-2 High Build Urethane for Marginally Cleaned Surfaces or Topcoating Existing Systems
- A.3 System 700-1 Zinc/Urethane/Fluoropolymer (Long Term Color & Gloss Retention)
- A.4 System 700-2 Fluoropolymer Overcoat System For Steel Tanks

B. - INTERIOR EXPOSURE (NON-IMMERSION)

- B.1 System No. N69-1 High Solids Epoxy
- B.2 System No. N69-6 High Build Epoxy (Over OEM Finishes)

C. – IMMERSION

- C.1 System No. N69-2 High Solids High Build Epoxy (Non-Potable Water)
- C.2 System No. N140 High Solids Epoxy (Potable Water)
- C.3 System No. 46-30 High Build Coal Tar Epoxy (Non-Potable Water)
- C.4 System No. 91-H₂O Zinc/Epoxy (Potable Water)
- C.5 System No. 406-1 Elastomeric Polyurethane

15.2 OVERHEAD METAL DECKING, JOIST

D. – INTERIOR EXPOSURE

- D.1 System No. 115-1 Uni-Bond DF

E. - EXTERIOR EXPOSURE

- E.1 System No. 27WB-5 Epoxy / DTM Acrylic

15.3 MILL COATED STEEL PIPE

F. – EXTERIOR/INTERIOR EXPOSURE (NON-IMMERSION)

- F.1 System No. N69-3 Epoxy-Polyamide

15.4 GALVANIZED STEEL – PIPE AND MISCELLANEOUS FABRICATIONS

G. – EXTERIOR (NON IMMERSION)

- G.1 System No. 1074U-2 Epoxy/High Build Urethane

H. - INTERIOR EXPOSURE (NON-IMMERSION)

H.1 System No. N69-6 Polyamide Epoxy

I. - IMMERSION (POTABLE WATER)

I.1 System No. N140-1 Epoxy-Polyamide (Potable Water)

15.5 WASTEWATER EQUIPMENT IN IMMERSION SERVICE SUCH AS RAKE ARMS, ETC.

J. - STEEL IN WASTEWATER IMMERSION

J.1 System No. 446-1 Perma-Shield MCU

15.6 CONCRETE

K. - EXTERIOR-ABOVE GRADE

- K.1 System No. 6-1 Acrylic Emulsion
- K.2 System No. 156-1 Modified Acrylic Elastomer
- K.3 System No. 100 Concrete Stain

L. - EXTERIOR-BELOW GRADE

- L.1 System No. 46-31 Coal Tar Epoxy
- L.2 System No. 100-1 Crystalline Waterproofing

M. - INTERIOR EXPOSURE (NON-IMMERSION)

- M.1 System No. 6-1 Acrylic Emulsion (Interior / Exterior)
- M.2 System No. N69-4 Epoxy-Polyamidoamine (Interior)
- M.3 System No. 84-1 High Solids Catalyzed Epoxy (Interior)
- M.4 System 113-2 Acrylic Epoxy Semi-Gloss

N. - IMMERSION - POTABLE & NON-POTABLE

- N.1 System No. N69-4 Epoxy-Polyamidoamine (Non-Potable Water)
- N.2 System No. 104-5 High Solids Epoxy (Non-Potable Water)
- N.3 System No. 46-31 High Build Coal Tar Epoxy (Non-Potable Water)
- N.4 System No. N140-2 Epoxy-Polyamidoamine (Potable Water)
- N.5 System No. 264-1 Elastomeric Polyurethane (Black)
- N.6 System No. 406-2 (Elastomeric Polyurethane Hybrid)

O. - INTERIOR EXPOSURE (NON-IMMERSION) OVER EXISTING COATINGS

- O.1 System No. 6-1 Acrylic Emulsion
- O.2 System No. 113-1 Acrylic Epoxy Semi-Gloss

15.7 CONCRETE FLOORS

P. – EPOXY FLOOR COATING

- P.1 System No. 205-1 Epoxy-Polyamide
- P.2 System No. 287-1 Waterborne Epoxy-Amine
- P.3 System No. 280-1 High Build Polyamide-Epoxy Glaze Floor
- P.4 System No. 237/280 Solid Color Double Broadcast Flooring (Non-Slip)
- P.5 System No. 222/284 Multi-Color Quartz Broadcast Floor and Cove Base

15.8 POROUS MASONRY (BLOCK)

Q. - EXTERIOR/INTERIOR EXPOSURE

- Q.1 System No. 6-2 Acrylic Emulsion – Low Sheen
- Q.2 System No. N69-15 Epoxy-Polyamide (Interior)
- Q.3 System No. 104-6 High Solids Epoxy (Interior Only)
- Q.4 System No. 113-1 Acrylic Epoxy Semi-Gloss (Interior Only)
- Q.5 System No. 156-1 Modified Acrylic Elastomer (Exterior)

15.9 GYPSUM WALLBOARD

R. – INTERIOR EXPOSURE

- R.1 System No. 113-5 Acrylic-Epoxy
- R.2 System No. N69-22 Hi-Build Epoxoline
- R.3 System No. 6-1 Acrylic Emulsion, Low Sheen (Interior / Exterior Exposure)

15.10 WOOD

S. - EXTERIOR/INTERIOR EXPOSURE

- S.1 System No. 2H-4 Alkyd (Gloss)
- S.2 System No. 6-5 Acrylic Latex (Flat)

15.11 PVC PIPE

T. - EXTERIOR OR INTERIOR

- T.1 System No. 1074U-23 Epoxy-Polyamide

15.12 INSULATED PIPE

U. - INTERIOR EXPOSURE

- U.1 System No. 6-1 Acrylic Emulsion, Low Sheen

15.13 HIGH HEAT COATING

V. – EXTERIOR /INTERIOR EXPOSURE

V.1 System No. 90E-92 Inorganic Zinc (750°F Max)

15.14 SURFACES EXPOSED TO H₂S/H₂SO₄ (SEVERE EXPOSURE/IMMERSION)

W. – CEMENTITIOUS SURFACES

W.1 System No. 446-2 Perma-Shield MCU (Concrete)

W.2 System No. 436-1 Perma-Shield FR (Concrete)

X. – FERROUS METAL SURFACES

X.1 System No. 435-2 Perma-Glaze (Steel)

15.15 EXTERIOR OF PRESTRESSED CONCRETE TANKS

Z.1 System No. 156-3 (New Tanks)

Z.2 System No. 156-4 System Existing Tanks (Previously Painted)

15.16 SECONDARY CONTAINMENT AREAS

AA.1 System No. 61-4 Epoxy Polyamide (For Fuel Oils)

AA.2 System No. 262-1 Flexible Polyurethane

AA.3 System No. 275 Fiber Reinforced Novolac Epoxy (For Acids & Caustics)

15.17 CLEAR WATER REPELLENT FOR CONCRETE, MASONRY, AND BRICK

BB.1 Silane/Siloxane Sealer (Water Based)

BB.2 Silane/Siloxane Sealer w/Concrete Stain

BB.3 RTV Silicone Rubber Water Repellent & Graffiti Protectorant

15.18 MANHOLES, WET WELLS, LIFT STATIONS, AND HEADWORKS AREAS

CC.1 System No. 434-3 Perma-Shield (Epoxy Mortar)

CC.2 System No. 100-1 Crystalline Waterproofing

15.19 CANAL PIPE CROSSINGS AND BACKFLOW PREVENTORS

DD.1 System No. 700-2 Zinc/Epoxy/Fluoropolymer for New Pipe or Pipe Requiring Removal of Existing Coatings

DD.2 System No. 27WB-2 High Build, High Gloss Urethane for Marginally Cleaned Surfaces or Topcoating Over Existing Systems

15.20 REPAINTING OF METAL BUILDINGS

EE.1 Exterior of Metal Building Panels

EE.2 Exterior Miscellaneous Metal Trim

17. COATING SCHEDULE

	STRUCTURE	SURFACE	EXPOSURE	COATING SYSTEM	FINISH COLOR
1	Tanks	Prestress	Exterior	Z.1	134GN Balsawood
2	Piping	Steel	Immersion	F.1	00WH White
3	Piping	Steel	Non Immersion	A.2	07RD Terra Cotta
4	Aeration Basins	Concrete	Immersion	N.2	31GR Slate Gray
5	Lift Stations	Concrete	Immersion	W.1	33GR Gray
6					
7		----- SAMPLE ONLY -----			
8					
9					
10					
11					
12					