TNEMEC

COATING SYSTEMS FOR

POWER FACILITIES

TNEMEC COMPANY, INC.

123 West 23rd Avenue, North Kansas City, Missouri, USA 64116

+1 816-483-3400 tnemec.com

PR

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SELECTION GUIDE

POWER FACILITIES

The Power Industry Selection Guide should be used to assist contractors, specifiers and owners in choosing the appropriate coating or lining system based upon the service area and required needs of the project. The Selection Guide identifies specific areas and substrates throughout Power Plant facilities. The Prime Mover's such as Steam Turbines, Hydro Turbines, Combustion Turbines, and Renewable Energy's utilize common types of energy resources like Fossil Fuels, Nuclear, Water, Sunlight, and Wind. Each Prime Mover of Power requires a well-engineered designed facility with many various materials of construction; e.g., steel and concrete. In order for these Power Plant facilities to create an efficient energy transformation, it is essential that all materials of construction and assets are protected from corrosion throughout the life of the facility. Our system guide identifies common areas of fossil fuel, hydro, and in-general Power facilities and offers a recommended coating system for both new construction and maintenance. Within each section, recommended system numbers will reference the full coating systems within the Power Systems Guide. Under each of the sub-section, a variety of systems are offered based upon the severity of the required service and/or other project factors.

GENERAL STRUCTURES

Common materials or areas of construction throughout a Power Plant Facility.

	New Construction	Maintenance
Interior Concrete	**PR.05.01, PR.05.03**	**PM.05.06**
Exterior Concrete	**PR.06.01, PR.06.02, PR.06.03, PR.06.04, PR. 06.05, PR.06.06, PR.06.08**	**PR.06.01, PR.06.02, PR.06.03, PR.06.04, PR.06.05, PR.06.06, PR.06.08**
Conveyors	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Structural Steel Interior	**PR.01.01, PR.01.02, PR.01.03, PR.01.04, PR.01.05, PR.01.06, PR.01.10**	**PR.01.06, PR.01.07, PR.01.08, PR.01.09, PR.01.11, PR.01.12**
Structural Steel Exterior	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13, PR.12.14**
Galvanized Structural Steel	**PR.03.01, PR.04.01**	**PR.03.01, PR.04.01**
Handrails	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13, PR.12.14**
Fire Protection	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13, PR.12.14**
Concrete Flooring - Thin Film	**PR.08.01**	**PR.08.01**
Concrete Flooring - Thick Film	**PR.08.02, PR.08.03, PR.08.04, PR.08.05**	**PR.08.02, PR.08.03, PR.08.04, PR.08.05**
Underground Service Water Piping Interior	**PR.18.03**	**PR.18.03**
Interior Drywall	**PR.07.01**	**PR.07.01**
High Temperature Piping CUI Below 350°F (177°C)	**PR.19.05, PR.22.03**	**PR.19.05**

COMBINED CYCLE POWER PLANT

The Combined Cycle Power Plant consist of two means of generation: combustion turbine and steam turbine. The combustion turbine is similar to a jet engine whose high temperature and high pressure exhaust spins a turbine whose shaft is connected to a generator. The hot exhaust is then coupled through a heat recovery steam generator (HRSG) that is used to heat water, thus producing steam to drive a secondary steam turbine generator. The combustion turbine typically uses Natural Gas as its fuel source. Some Combine Cycle power plants can reach efficiencies of nearly 90%. Common areas throughout these facilities are listed with a recommended options of both new construction and maintenance Tnemec Coating systems.

	New Construction	Maintenance
Ground Storage Tank Exterior	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Water Treatment Areas - Concrete Containment	**PR.09.02**	**PR.09.02**
Water Treatment Areas Pumps / Piping / Tank Exteriors	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Water treatment Areas - Clarifiers Interiors	**PR.16.01, PR.17.01, PR.17.03, PR.18.02**	**PR.16.01, PR.17.01, PR.17.03, PR.18.02**
Heat Recovery Steam Generator - Interior Duct	**PR.22.11**	**PR.22.11**
Gas / Steam Turbine - Below 200°F (93°C)	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Air Intake	**PR.01.01, PR.01.02, PR.01.03, PR.01.04, PR.01.05, PR.01.06, PR.01.10**	**PR.01.06, PR.01.07, P.R.01.08, PR.01.09, PR.01.11, PR.01.12**
Generator Modules - Below 200°F (93°C)	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Condenser Housing Exterior	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Service Water Piping Interior	**PR.18.03**	**PR.18.03**
Natural Gas Piping Interior	**PR.16.02**	**PR.16.02**
CUI - Blowdown Tank Piping Under 350°F (177°C)	**PR.19.05**	**PR.19.05**
Piping Uninsulated Exterior Below 200°F (93°C)	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Cooling Tower - Exterior Surface	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**

COAL FIRED POWER PLANT

In Coal Fired Plants, Coal is burned two different ways and utilized as a fuel source. First, in traditional coal-fired plants, the coal is placed on steel conveyors and burned as it moves through the boiler. The second is Pulverized Coal Plants where the coal is crushed into a fine powder and injected into the furnace and burned similar to a gas. Combustion by-products include solid residue of bottom ash and gases that include fine ash, nitrogen dioxide, carbon monoxide, and sulfur dioxide. Depending on local regulations, selective catalytic reducers (SCR), precipitators flue gas desulfurization (FGD), and bag house equipment and systems are installed to collect combustion by-products before they reach the atmosphere. Our system guide reviews the materials of construction throughout areas of the coal fired power facility and offers a coating recommendation for both new construction and maintenance of these assets.

	New Construction	Maintenance
Conveyors	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Underground Service Water Piping	**PR.18.03**	**PR.18.03**
Pump House	**PR.01.01, PR.01.02, PR.01.03, PR.01.04, PR.01.05, PR.01.06, PR.01.10**	**PR.01.06, PR.01.07, PR.01.08, PR.01.09, PR.01.11, PR.01.12**
Water Treatment - Concrete Secondary Containment	**PR.09.02**	**PR.09.02**
Water Treatment - Process Area Floors	**PR.08.01, PR.08.02, PR.08.03, PR.08.04, PR.08.05**	**PR.08.01, PR.08.02, PR.08.03, PR.08.04, PR.08.05, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Water Treatment - Pumps, Piping, Tank Exteriors	**PR.12.03, PR.12.05, PR.12.06, PR.12.07**	**PR.12.08, PR.12.09, PR.12.10, PR.12.11**
Demineralized Water Tank Interior	**PR.16.03**	**PR.16.03**
Structural Steel Powerhouse, Precipitator, FGD Area - New	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
CMU Interior	**PM.05.01, PR.05.03**	**PR.05.06**
CMU Exterior	**PR.06.01, PR.06.02, PR.06.03, PR.06.04, PR.06.05, PR.06.06, PR.06.08**	**PR.06.01, PR.06.02, PR.06.03, PR.06.04, PR.06.05, PR.06.06, PR.06.08**
Concrete Floors	**PR.08.01, PR.08.02, PR.08.03, PR.08.04, PR.08.05**	**PR.08.01, PR.08.02, PR.08.03, PR.08.04, PR.08.05**
Circulating Water Pipe - Steel Lining	**PR.18.03**	**PR.18.03**
Circulating Water Pipe - Concrete Lining	**PR.18.01, PR.18.02, PR.18.04**	**PR.18.01, PR.18.02, PR.18.04**
Condenser Water Box Lining	**PR.16.01**	**PR.16.01**
Fly Ash Silos - Exterior Concrete	**PR.06.01, PR.06.08, PR.06.09**	**PR.06.01, PR.06.08, PR.06.09**
Fly Ash Silos - Exterior Steel	**PR.12.05, PR.12.06**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10**
External Stacks - Concrete	**PR.06.01, PR.06.08, PR.06.09**	**PR.06.01, PR.06.08, PR.06.09**

COAL FIRED POWER PLANT (CONTINUED)

	New Construction	Maintenance
Turbine - Below 200°F (93°C)	**PR.01.01, PR.01.02, PR.01.03, PR.01.04, PR.01.05, PR.01.06, PR.01.10**	**PR.01.06, PR.01.07, PR.01.08, PR.01.09, PR.01.11, PR.01.12**
Ash Slurry Tank Lining	**PR.16.04**	**PR.16.04**
Ash Hoppers	**PR.16.04**	**PR.16.04**
Coal Bunkers Lining	**PR.16.04**	**PR.16.04**
Coal Chutes Lining	**PR.16.04**	**PR.16.04**
Demineralized Water Tanks Lining	**PR.16.04**	**PR.16.04**
Fuel Storage Tanks Lining	**PR.16.03**	**PR.16.03**
Water Cooling Tower - Exterior Structural Steel, Piping	**PR.12.15**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10**

FLUE GAS DESULFURIZATION (FGD) AREA

Within the Electric Utility market, most lining applications exist in the FGD (Flue Gas Desulfurization) systems. The most severe corrosion conditions are within the mixing zones (By Pass) and gas to gas preheater areas. The environment includes, high H_2SO_4 acid concentrations and wet/dry interfaces. These conditions can vary from one plant to another. The process treats Flue Gas coming from the generating unit. To satisfy environmental regulations, the gas is passed through FGD Scrubbers/absorbers to remove SO_2. The hot gases are exposed to an aqueous lime slurry in the FGD scrubber. This reacts with the SO_2 producing calcium sulfite, calcium sulfate, and sulfurous acid. The slurry contains chlorides and fluorides removed from the flue gas. The gas passing through the bypass duct work from the boiler can range from 280°F to 350°F (138°C to 177°C). The scrubbed flue gas can range from 115°F to 130°F (46°C to 54°C). Unscrubbed (bypass) gas may go through the duct when the scrubber system is down or when the hot gas is used to help move the scrubbed gas up the stack. Additionally, Auxiliary vessels play an important role in the FGD system. The process starts with limestone transferred from the limestone bunker or storage area to the ball mill to be ground. The ground limestone is then transferred to the milled product tank (chemical feed tank) where make-up water is added. The slurry then proceeds to the limestone slurry storage tanks. The slurry will then move to the lime recycle and make-up water tanks as part of the FGD process.

	New Construction	Maintenance
Scrubber Interiors	**PR.22.01, PR.22.02, PR.22.03, PR.22.05**	**PR.22.01, PR.22.02, PR.22.03, PR.22.05**
Scrubbed Interiors - Spray Nozzle & Floor Area	**PR.22.05**	**PR.22.05**
Outlet Duct Interior	**PR.22.01, PR.22.02, PR.22.03, PR.22.05, PR.22.10, PR.22.11, PR.22.12**	**PR.22.01, PR.22.02, PR.22.03, PR.22.05, PR.22.10, PR.22.11, PR.22.12**
By-Pass Duct Interior	**PR.22.10, PR.22.11, PR.22.12**	**PR.22.10, PR.22.11, PR.22.12**

FLUE GAS DESULFURIZATION (FGD) AREA (CONTINUED)

	New Construction	Maintenance
Stack Liner Steel	**PR.22.10, PR.22.11, PR.22.12**	**PR.22.10, PR.22.11, PR.22.12**
Bag House Interior Steel - Dry FGD	**PR.22.09, PR.22.10, PR.22.11, PR.22.12**	**PR.22.09, PR.22.10, PR.22.11, PR.22.12**
Precipitators	**PR.22.01, PR.22.02, PR.22.03, PR.22.05, PR.22.10, PR.22.11, PR.22.12**	**PR.22.01, PR.22.02, PR.22.03, PR.22.05, PR.22.10, PR.22.11, PR.22.12**
Auxiliary storage Tank Floor and 3 ft (0.9 m) up sidewalls	**PR.22.06 with Abrasion Resistance**	**PR.22.06 with Abrasion Resistance**
Auxiliary Storage Tank - Balance of Tank	**PR.22.01**	**PR.22.01**
Limestone Slurry Storage Tanks	**PR.22.06 with Abrasion Resistance**	**PR.22.06 with Abrasion Resistance**
Reagent Feed Tank - Floor and 3 ft (0.9 m) up sidewall	**PR.22.06 with Abrasion Resistance**	**PR.22.06 with Abrasion Resistance**
Reagent Feed Tank - Balance of Tank	**PR.22.01**	**PR.22.01**
Filter Feed Tank - Floor and 3 ft (0.9 m) up sidewall	**PR.22.06 with Abrasion Resistance**	**PR.22.06 with Abrasion Resistance**
Filter Feed Tank - Balance of Tank	**PR.22.01**	**PR.22.01**
Filtrate Return Tank	**PR.16.04**	**PR.16.04**
FGD Purge Tank	**PR.22.12**	**PR.22.12**
Make-Up Water Tank	**PR.16.03**	**PR.16.03**
Primary Hydroclone Collection Tank	**PR.22.12**	**PR.22.12**
Water Expansion Tank Sump	**PR.16.03**	**PR.16.03**
Absorber Area Sump and Trench	**PR.22.08 with Abrasion Resistance**	**PR.22.08 with Abrasion Resistance**
Reagent Preparation Area Sump and Trench	**PR.22.08 with Abrasion Resistance**	**PR.22.08 with Abrasion Resistance**
Dewatering Area Sump and Trench	**PR.22.08 with Abrasion Resistance**	**PR.22.08 with Abrasion Resistance**
Dibasic Acid Secondary Containment Area	**PR.22.06**	**PR.22.06**
Organic Acid Secondary Containment Area	**PR.22.06**	**PR.22.06**

FLUE GAS DESULFURIZATION (FGD) AREA (CONTINUED)

	New Construction	Maintenance
Hydrocyclone Room Floor	**PR.08.06**	**PR.08.06**
Concrete Trenches - No Severe Chemistry	**PR.08.06**	**PR.08.06**
Battery Room Floors	**PR.08.06**	**PR.08.06**
Powerhouse Sump	**PR.22.08**	**PR.22.08**
Clarifier - Grouted Floor	**PR.22.06, PR.22.08**	**PR.22.06, PR.22.08**
Clarifier - Side Walls	**PR.18.05**	**PR.18.05**
Clarifier - Rake Arms	**PR.01.03**	**PR.01.03**
Filtrate Sump	**PR.22.08**	**PR.22.08**
Building Process Water Trenches	**PR.22.08**	**PR.22.08**
Thickener Tank - Side Walls	**PR.22.09**	**PR.22.09**
Thickener Tanks - Bottom and 3 ft (0.9 m) Sidewalls	**PR.22.06**	**PR.22.06**
Recycle Tank Sidewalls	**PR.22.09**	**PR.22.09**
Recycle Tank - Bottom and 3 ft (0.9 m) Sidewalls	**PR.22.06**	**PR.22.06**
Equalization Tank - Sidewalls	**PR.22.09**	**PR.22.09**
Equalization Tank Bottom and 3 ft (0.9 m) Sidewalls	**PR.22.06**	**PR.22.06**
De-watering Bin	**PR.16.05**	**PR.16.05**
Scrubber & Absorber Exteriors	**PR.12.03, PR.12.05, PR.12.06, PR.12.07**	**PR.12.08, PR.12.09, PR.12.10, PR.12.11, PR.12.13, PR.12.14**
Process Floors	**PR.08.06**	**PR.08.06**

HYDROELECTRIC POWER PLANT

Hydro power plants capture the energy of moving water. There are multiple ways hydro energy can be extracted. Falling water such as in a Penstock, Flume, or water wheel can be used to drive a hydro turbine. Hydro energy can be extracted from flowing water such as the lower section of dams where the pressure forces water flow. Our system guide reviews specific areas throughout the Hydro energy process and offers a coating recommendation for both new construction and maintenance of these assets.

	New Construction	Maintenance
Penstock Interior Lining	**PR.16.06, PR.18.02, PR.18.03**	**PR.16.06, PR.18.02, PR.18.03**
Penstock Exterior Above Ground	**PR.12.05, PR.12.06**	**PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Penstock Exterior In Tunnel	**PR.12.05, PR.12.06**	**PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Trash Racks	**PR.15.02, PR.18.05**	**PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Scroll Case / Spiral Case	**PR.15.02, PR.18.03**	**PR.15.02, PR.18.05**
Draft Tube	**PR.15.02, PR.18.03**	**PR.15.02, PR.18.03**
Filling and Drain Lines	**PR.15.02, PR.18.03**	**PR.15.02, PR.18.03**
Wicket Gates	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**	**PR.15.02, PR.18.03**
Stay Vanes	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**
Spillway Radial Gates, Drum Gate, Bascule Gate	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**
Surgetank	**PR.16.03, PR.18.06**	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**
Knife Gate, Slide Gate, Sluiceway Gate, Weir Gate	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**	**PR.16.03, PR.18.06**
Water Storage Tank	**PR.16.01**	**PR.15.02, PR.16.06, PR.18.05, PR.18.06**
Overhead Cranes	**PR.12.05, PR.12.06**	**PR.16.01**
Turbine Covers	**PR.01.01, PR.01.02, PR.01.03, PR.01.04, PR.01.05, PR.01.06, PR.01.10**	**PR.12.01, PR.12.02, PR.12.03, PR.12.04, PR.12.09, PR.12.10, PR.12.11, PR.12.12, PR.12.13**
Exposed Service Water Piping	**PR.01.01, PR.01.02, PR.01.03, PR.01.04, PR.01.05, PR.01.06, PR.01.10**	**PR.01.06, PR.01.07, PR.01.08, PR.01.09, PR.01.11, PR.01.12**
Powerhouse Floors	**PR.08.06**	**PR.08.06**

COATING SYSTEMS

FOR POWER FACILITIES

The following coating systems have been specifically selected based on years of performance in various power plant facilities, including combined cycle, coal fired and hydroelectric power plants. Each coating system in the guide is numbered and segmented based on substrates and exposures commonly found within these kinds of facilities. Although the following systems can be adjusted for specific projects, the coatings and linings within this guide are those most highly recommended by Tnemec. To review project needs and discuss alternative coating options, contact a local Tnemec representative or request more information at tnemec.com.

PR.01: INTERIOR STEEL

System Number	PR.01.01
Description	Up to 12 Months Field Exposure of Steel, Enclosed
Type	MIO-Zinc Urethane
Surface Preparation	SSPC-SP3 (Rust Grade Condition C)
Primer	Series 394 PerimePrime at 2.5 - 3.5 mils DFT
Total DFT	2.5 - 3.5 mils

System Number	PR.01.02
Description	Up to 12 Months Field Exposure of Shop Primer and/or Dry Interior, Enclosed
Type	Alkyd / Acrylic / Acrylic
Surface Preparation	SSPC-SP2 / 3 (Rust Grade Condition C)
Primer	Series V10 Tnemec Primer or Series 37H Chem-Prime H.S. at 2.0 - 3.5 mils DFT
Intermediate	Series 1028 or 1029 Enduratone at 2.0 - 3.0 mils DFT*
Finish Coat	Series 1028 or 1029 Enduratone at 2.0 - 3.0 mils DFT*
Total DFT	6.0 - 9.5 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.

System Number	PR.01.03
Description	Moderate Exposure
Type	Epoxy / Epoxy / Epoxy
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series N69 Hi-Build Epoxoline II at 4.0 - 6.0 mils DFT*
Intermediate	Series N69 Hi-Build Epoxoline II at 4.0 - 6.0 mils DFT*
Finish Coat	Series N69 Hi-Build Epoxoline II at 4.0 - 6.0 mils DFT*
Total DFT	12.0 - 18.0 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.01: INTERIOR STEEL (CONTINUED)

System Number	PR.01.04
Description	Moderate Exposure, Color Stable
Type	Zinc-Rich Urethane / Epoxy / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 2.0 - 3.0 mils DFT*
Finish Coat	Series 73, 1094 or 1095 Endura-Shield at 2.0 - 5.0 mils DFT*
Total DFT	6.5 - 11.5 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.

System Number	PR.01.05
Description	Moderate Exposure, Color Stable
Type	Zinc-Rich Urethane / Epoxy Mastic / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series 132 ProTuff Mastic at 3.0 - 5.0 mils DFT
Finish Coat	Series 1094 or 1095 Endura-Shield at 2.0 - 5.0 mils DFT
Total DFT	7.5 - 13.5 mils

System Number	PR.01.06
Description	Surface Tolerant, Low-Temperature / Damp Surfaces (Light Corrosion)
Type	Epoxy Mastic / Epoxy
Surface Preparation	SSPC-SP4 / NACE WJ4 and/or SSPC-SP2/3
Primer	Series 133 ProTuff Aluminum at 4.0 - 6.0 mils DFT
Finish Coat	Series 138 ProTuff at 3.0 - 5.0 mils DFT
Total DFT	7.0 - 11.0 mils

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PR.01: INTERIOR STEEL (CONTINUED)

System Number	PR.01.07
Description	Surface Tolerant, Low-Temperature / Damp Surfaces (Light Corrosion)
Type	Epoxy Mastic / Epoxy
Surface Preparation	SSPC-SP13 / NACE 6
Primer	Series 133 ProTuff Aluminum at 3.0 - 5.0 mils DFT
Finish Coat	Series 138 ProTuff at 3.0 - 5.0 mils DFT
Total DFT	6.0 - 10.0 mils

System Number	PR.01.08
Description	Surface Tolerant, Low-Temperature / Damp Surfaces (Heavy Corrosion)
Type	Epoxy Mastic / Epoxy Mastic / Epoxy
Surface Preparation	SSPC-SP4 / NACE WJ4 and/or SSPC-SP2/3
Spot Primer	Series 133 ProTuff Aluminum at 4.0 - 6.0 mils DFT
Intermediate	Series 132 ProTuff Mastic at 4.0 - 6.0 mils DFT
Finish Coat	Series 138 ProTuff at 3.0 - 5.0 mils DFT
Total DFT	11.0 - 17.0 mils

System Number	PR.01.09
Description	Surface Tolerant, Low-Temperature / Damp Surfaces (Heavy Corrosion)
Type	Epoxy Mastic / Epoxy Mastic / Epoxy
Surface Preparation	SSPC-SP13 / NACE 6
Spot Primer	Series 133 at 4.0 - 6.0 mils DFT
Intermediate	Series 132 ProTuff Mastic at 3.0 - 5.0 mils DFT
Finish Coat	Series 138 ProTuff at 3.0 - 5.0 mils DFT or Series 1094 Endura-Shield at 2.0 - 5.0 mils DFT
Total DFT	10.0 - 16.0 mils or 9.0 - 16.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.01: INTERIOR STEEL (CONTINUED)

System Number	PR.01.10
Description	Wet, Corrosive Fumes, Stain Exposure, Physical Abuse
Type	Zinc-Rich Urethane / Epoxy / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series N69 Hi-Build Epoxoline or Series 27 F.C. Typoxy at 4.0 - 6.0 mils DFT
Finish Coat	Series 73, 1094 or 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	8.5 - 12.5 mils

System Number	PR.01.11
Description	Steel Maintenance
Type	Polyurethane / Polyurethane / Polyurethane
Surface Preparation	SSPC-SP2 or SSPC-SP3
Primer	Series 1 Omnithane at 2.5 - 3.5 mils DFT
Finish Coat	Two coats Series 73 Endura-Shield at 2.0 - 5.0 mils DFT
Total DFT	6.5 - 8.5 mils

System Number	PR.01.12
Description	Maintenance Coating In Wet, Corrosive Environments
Type	Epoxy / Polyurethane
Surface Preparation	SSPC-SP2, SSPC-SP3 or SSPC-SP6 / NACE 3
Primer	Series 135 Chembuild at 4.0 - 6.0 mils DFT
Finish Coat	Series 73 Endura-Shield at 2.0 - 5.0 mils DFT
Total DFT	6.0 - 11.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.02: INTERIOR STEEL - POTABLE WATER

System Number	PR.02.01
Special Qualifications	AWWA D102 Paint System ICS-3; NSF/ANSI/CAN Std. 61 Compliant Lining; NSF/ANSI/CAN 600
Description	Interior, Wet
Type	Zinc-Rich Urethane / Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer	Series 91-H_2O or 94-H_2O Hydro-Zinc at 2.5 - 3.5 mils DFT
Finish Coat	Series 22 or FC22 Epoxoline at 20.0 - 30.0 mils DFT
Total DFT	22.5 - 33.5 mils

System Number	PR.02.02
Special Qualifications	AWWA D102 Paint System ICS-4; NSF/ANSI Std. 61 Compliant Lining; NSF/ANSI/CAN 600
Description	Interior, Wet
Type	Zinc-Rich Urethane / Polyurethane
Surface Preparation	SSPC-SP10 / NACE 2
Primer	Series 91-H_2O or 94-H_2O Hydro-Zinc at 2.5 - 3.5 mils DFT
Finish Coat	Series 406 Elasto-Shield at 25.0 - 30.0 mils DFT
Total DFT	27.5 - 33.5 mils

PR.03: INTERIOR GALVANIZED STEEL

System Number	PR.03.01
Description	Interior or Exterior - Aged Galvanized
Type	Epoxy Mastic / Polyurethane
Surface Preparation	Contact Tnemec for recommendation (reference Technical Bulletin 10-78)
Primer	Series 132 ProTuff Mastic at 2.0 - 3.0 mils DFT
Finish Coat	Series 1094 or 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.03: INTERIOR GALVANIZED STEEL (CONTINUED)

System Number	PR.03.02
Special Qualifications	**Coating system is tested in accordance with ISO 12944-6 (2018)***
Description	Interior or Exterior - Aged Galvanized
Type	Epoxy Mastic / Polyurethane
Surface Preparation	Contact Tnemec for recommendation (reference Technical Bulletin 10-78)
Primer	Series 132 ProTuff Mastic at 2.0 - 3.0 mils DFT
Finish Coat	Series 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils

*TR7336-A. Contact your Tnemec representative for more information.

PR.04: INTERIOR OR EXTERIOR GALVANIZED STEEL

System Number	PR.04.01
Description	Mild to Moderate Conditions and/or UV Exposure
Type	Epoxy / Polyurethane
Surface Preparation	Contact Tnemec for recommendation*
Primer	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 2.0 - 3.0 mils DFT
Finish Coat	Series 73, 1094 or 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils

*Galvanized Steel and Nonferrous Metal: Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services for information. Reference Technical Bulletin 10-78, ASTM D6386.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.04: INTERIOR OR EXTERIOR GALVANIZED STEEL (CONTINUED)

System Number	PR.04.02
Special Qualifications	Coating system is tested in accordance with ISO 12944-6 (2018)*
Description	Mild to Moderate Conditions and/or UV Exposure
Type	Epoxy / Polyurethane
Surface Preparation	Contact Tnemec for recommendation**
Primer	Series N69 Hi-Build Epoxoline II at 2.0 - 3.0 mils DFT
Finish Coat	Series 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils

*TR7337-A and TR7338-A. Contact your Tnemec representative for more information.
**Galvanized Steel and Nonferrous Metal: Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services for information. Reference Technical Bulletin 10-78, ASTM D6386.

PR.05: INTERIOR CONCRETE, MASONRY & CMU

System Number	PR.05.01
Description	Mild to Moderate Exposure, Dry
Type	Modified Cement / Acrylic-Epoxy / Acrylic-Epoxy
Surface Preparation	Clean and Dry
Filler / Surfacer	Series 1254 EpoxoBlock WB at 75 - 100 ft^2/gal (6.9 - 9.3 m^2/gal)
Intermediate	Series 287 Enviro-Pox at 2.0 - 3.0 mils DFT
Finish Coat	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils (plus filler)

*Brush or roller application may require additional coats to achieve recommended film thickness.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.05: INTERIOR CONCRETE, MASONRY & CMU (CONTINUED)

System Number	PR.05.02
Description	Moderate Exposure (often used above Stranlok system in non-washdown areas)
Type	Mildew-Resistant Specialized Elastomeric Waterborne Acrylate
Surface Preparation	Clean and Dry
Primer	Series 151-1051 Elasto-Grip FC at 1.0 - 2.5 mils DFT*
Intermediate	Series 158 Bio-Lastic at 6.0 - 8.0 mils DFT
Finish Coat	Series 158 Bio-Lastic at 6.0 - 8.0 mils DFT
Total DFT	13.0 - 18.5 mils

*Haydite, split-face and lightweight block will require a filler/surfacer to provide a smooth, pin-hole-free surface. Series 130 Envirofill is recommended.

System Number	PR.05.03
Description	Moderate to Severe Conditions, Frequently Cleaned or Wet
Type	Modified Cement / Epoxy / Epoxy
Surface Preparation	Clean and Dry
Filler / Surfacer	Series 1254 EpoxoBlock WB at 75 to 100 ft^2/gal (6.9 - 9.3 m^2/gal)
Primer	Series 280 Tneme-Glaze at 6.0 - 8.0 mils DFT
Intermediate	Series 280 Tneme-Glaze at 6.0 - 8.0 mils DFT*
Finish Coat	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT*
Total DFT	14.0 - 19.0 mils (plus filler)

*For superior color and gloss retention, and stain and abrasion-resistance, Series 280 may be topcoated with Series 290 CRU or 297 Enviro-Glaze.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.05: INTERIOR CONCRETE, MASONRY & CMU (CONTINUED)

System Number	PR.05.04
Description	Heavy Abuse
Type	100% Solids Fiber-Reinforced Epoxy
Surface Preparation	Clean and Dry
Bedding Coat	Series 215 Surfacing Epoxy at 1/16 in. (1.6 mm) minimum
Reinforcing Mat	Series 273 Stranlok ML Part C embedded into wet Series 215 Surfacing Epoxy
Saturant	Series 273 Stranlok ML at 8.0 - 12.0 mils DFT
Intermediate	Series 280 Tneme-Glaze at 6.0 - 8.0 mils DFT*
Finish Coat	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT
Total DFT	16.0 - 23.0 mils

*For superior color and gloss retention, and stain and abrasion-resistance, Series 280 may be topcoated with Series 290 CRU or 297 Enviro-Glaze.

System Number	PR.05.05
Description	Heavy Abuse, Washdown & Wet Areas
Type	100% Solids Fiber-Reinforced Epoxy
Surface Preparation	Clean and Dry Concrete: SSPC-SP13 / NACE 6 - ICRI CSP 3-4
Filler / Surfacer (for bare blocks)	Series 1254 EpoxoBlock WB or Series 130 Envirofill Concrete & Masonry: 100 - 150 ft^2 (9.3 - 13.9 m^2) per gallon Lightweight Block & CMU: 75 - 100 ft^2 (6.9 - 9.3 m^2) per gallon
Primer	Series 201 Epoxoprime at 6.0 - 12.0 mils DFT*
Intermediate	Series 270 Stranlok at 25.0 - 40.0 mils DFT (spray applied in 2 passes)
Finish Coat	Series 280 Tneme-Glaze at 6.0 - 8.0 mils DFT**
Total DFT	37.0 - 60.0 mils

*Haydite, split-face and lightweight block will require a filler/surfacer to provide a smooth, pin-hole free surface. Series 130 Envirofill is recommended.
**For superior color and gloss retention, and stain and abrasion-resistance, Series 280 may be topcoated with Series 290 CRU or 297 Enviro-Glaze.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.05: INTERIOR CONCRETE, MASONRY & CMU (CONTINUED)

System Number	PR.05.06
Description	Breathable Coating and Minor Hairline Crack Fill
Type	Waterborne Acrylate
Surface Preparation	Contact Tnemec for recommendation
Finish Coat	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Finish Coat	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Total DFT	8.0 - 16.0 mils

System Number	PR.05.07
Description	Heavy Abuse, Wash Down and Wet Areas
Type	100% Solids Fiber-Reinforced Epoxy
Surface Preparation	SSPC-SP13 / NACE 6, ICRI CSP 3-4
Filler	Series 215 Surfacing Epoxy (as needed)
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT
Bedding Coat	Series 273 Stranlok ML at 8.0 - 10.0 mils DFT
Reinforcing Mat	Series 273 Stranlok Part C embedded into wet Series 273
Saturant Coat	Series 273 Stranlok ML at 8.0 - 12.0 mils DFT
Intermediate	Series 280 Tneme-Glaze at 4.0 - 6.0 mils DFT**
Finish	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT
Total DFT	28.0 - 39.0 mils (plus filler)

*Haydite, split-face and lightweight block will require a filler/surfacer to provide a smooth, pin-hole free surface. Series 130 Envirofill is recommended.
**For superior color and gloss retention, and stain and abrasion-resistance, Series 280 may be topcoated with Series 290 CRU or 297 Enviro-Glaze.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.06: CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE & DENSE CMU

System Number	PR.06.01
Description	Exterior Exposed
Type	Waterborne Acrylate / Waterborne Acrylate
Surface Preparation	SSPC-SP13 / NACE 6, Clean and Dry
Primer	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Finish Coat	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Total DFT	8.0 - 16.0 mils

System Number	PR.06.02
Description	Below Grade or Immersion
Type	Coal Tar Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 3
Finish Coat	Series 46H-413 Hi-Build Tneme-Tar at 14.0 - 20.0 mils DFT
Total DFT	14.0 - 20.0 mils

System Number	PR.06.03
Description	Immersion
Type	Epoxy / Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 3
Primer	Series N69 Hi-Build Epoxoline II at 4.0 - 6.0 mils DFT
Finish Coat	Series N69 Hi-Build Epoxoline II at 4.0 - 6.0 mils DFT
Total DFT	8.0 - 12.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.06: CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE & DENSE CMU (CONTINUED)

System Number	PR.06.04
Description	Immersion
Type	Vinyl Ester / Vinyl Ester
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 5
Repair Mortar	Series 217 Mortar Crete at 1/4 in. - 2.0 in. (6.4 - 50.8 mm) DFT
Primer (Optional Resurfacer	Series 218 MortarClad at 1/16 in. - 1/2 in. (1.6 - 12.7 mm) DFT
Intermediate	Series 120-5002 Vinester at 12.0 - 18.0 mils DFT
Finish Coat	Series 120-5001 Vinester at 12.0 - 18.0 mils DFT
Total DFT	24.0 - 36.0 mils

System Number	PR.06.05
Description	Immersion H_2S Vapor Exposure
Type	Modified Polyamine Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 5
Repair Mortar	Series 217 Mortar Crete at 1/4 in. - 2.0 in. (6.4 - 50.8 mm) DFT
Primer (Optional Resurfacer)	Series 218 MortarClad at 1/16 in. - 1/2 in. (1.6 - 12.7 mm) DFT
Intermediate	Series 434 Perma-Shield H_2S at 1/8 in. (3.2 mm) - 125.0 mils
Finish Coat (Optional)	Series 435 Perma-Glaze at 15.0 - 20.0 mils
Total DFT	Nominal 1/8 inch system

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.06: CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE & DENSE CMU (CONTINUED)

System Number	PR.06.06
Description	Immersion
Type	Epoxy / Modified Polyurethane
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 3-5
Repair Mortar	Series 217 Mortar Crete at 1/4 in. - 2.0 in. (6.4 - 50.8 mm) DFT
Primer	Series N69 Hi-Build Epoxoline at 4.0 - 6.0 mils DFT
Primer (Optional Resurfacer	Series 218 MortarClad at 1/16 in. - 1/2 in. (1.6 - 12.7 mm) DFT
Finish Coat	Series 262 Elasto-Shield at 50.0 mils minimum DFT
Total DFT	54.0 mils minimum

System Number	PR.06.07
Special Qualifications	ANSI/NSF Std. 61 Compliant Lining
Description	Ultrafiltration Tanks
Type	Mat-Reinforced Chemical-Resistant Lining
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 2-4
Primer	Series N140F Pota-Pox Plus at 3.0 - 6.0 mils DFT
Bedding Coat	Series 215ML Mat-Reinforced Epoxy Lining at 60.0 - 80.0 mils DFT
Reinforcement	Series 211-215 Fiberglass Mat
Saturant Coat	Series 22 Epoxoline at 8.0 - 12.0 mils DFT
Finish Coat	Series 22 Epoxoline at 20.0 - 30.0 mils DFT
Total DFT	91.0 - 128.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.06: CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE & DENSE CMU (CONTINUED)

System Number	PR.06.08
Description	High Performance Acrylic Epoxy
Type	Waterborne Acrylic Epoxy / Waterborne Acrylic Epoxy
Surface Preparation	SSPC-SP13 / NACE 3 - ICRI CSP 3-5
Primer	Series 113 H.B. Tneme-Tufcoat at 4.0 - 6.0 mils DFT
Finish Coat	Series 114 H.B. Tneme-Tufcoat at 4.0 - 6.0 mils DFT
Total DFT	8.0 - 12.0 mils

System Number	PR.06.09
Description	Concrete Fill & Finish - Inorganic Waterbased Epoxy
Type	Epoxy / Acrylic Emulsion
Surface Preparation	Contact Tnemec for recommendation
Primer	Series 1254 EpoxoBlock WB at 100 - 150 ft^2 (9.3 - 13.9 m^2) per gallon
Intermediate	Series 1026 Enduratone at 2.0 - 3.0 mils DFT
Finish Coat	Series 1026 Enduratone at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils (plus primer)

PR.07: WALLBOARD & DRYWALL

System Number	PR.07.01
Description	Moderate Conditions, Dry
Type	Waterbased Epoxy / Acrylic-Epoxy
Surface Preparation	Clean and Dry
Primer	Series 151-1051 Elasto-Grip FC at 1.0 - 2.0 mils DFT
Finish Coat	Series 113 or 114 H.B. Tneme-Tufcoat at 4.0 - 6.0 mils DFT*
Total DFT	5.0 - 8.0 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.07: WALLBOARD & DRYWALL (CONTINUED)

System Number	PR.07.02
Description	Heavy Abuse, Fiber-Reinforced
Type	Fiberglass Reinforced 100% Solids Epoxy
Surface Preparation	Refer to Product Data Sheet
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT
Intermediate	Series 270 Stranlok at 25.0 - 40.0 mils DFT or 273 Stranlok ML at 20.0 - 25.0 mils DFT with reinforcing mat
Finish Coat	Series 280 Tneme-Glaze at 6.0 - 8.0 mils DFT*
Total DFT	37.0 - 56.0 mils or 32.0 - 41.0 mils with reinforcing mat

*For superior color and gloss retention, and stain and abrasion-resistance, Series 280 may be topcoated with Series 290 CRU or 297 Enviro-Glaze.

System Number	PR.07.03
Description	Heavy Abuse, Fiber-Reinforced
Type	Fiberglass Reinforced 100% Solids Epoxy
Surface Preparation	Clean and Dry
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT
Base Coat	Series 273 Stranlok ML at 8.0 - 12.0 mils DFT
Fiberglass Reinforcing Mat	Series 273 Stranlok ML at 36 in. x 180 ft (540 ft^2) per roll
Saturant Coat	Series 273 Stranlok ML at 8.0 - 12.0 mils with reinforcing mat
Finish Coat	Series 280 Tneme-Glaze at 6.0 - 8.0 mils DFT*
Total DFT	28.0 - 40.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.08: INTERIOR CONCRETE FLOORING

System Number	PR.08.01
Description	Mild Abuse
Type	Waterborne Epoxy / Waterborne Polyurethane
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 3 or greater*
Primer	Series 287 Enviro-Pox at 3.0 - 4.0 mils DFT**
Intermediate	Series 287 Enviro-Pox at 3.0 - 4.0 mils DFT
Finish Coat (Optional)	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT
Total DFT	8.0 - 11.0 mils

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
**For moisture content up to 15 lbs per 1,000 sq. ft. or relative humidity up to 95%, Series 208 may be substituted for the primer.

System Number	PR.08.02
Description	Mild to Moderate Abuse, Foot Traffic, Chemical Contact
Type	Epoxy / Epoxy / Epoxy
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 3 or greater*
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT**
Intermediate	Series 280 or 281 Tneme-Glaze at 6.0 - 8.0 mils DFT
Finish Coat	Series 280 or 281 Tneme-Glaze at 6.0 - 8.0 mils DFT***
Total DFT	18.0 - 24.0 mils

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
**For moisture content up to 15 lbs per 1,000 sq. ft. or relative humidity up to 95%, Series 208 may be substituted for the primer.
***For superior color and gloss retention, and stain and abrasion-resistance, Series 280 or 281 may be topcoated with Series 247 or 248 EverThane, Series 290 or 291 CRU or Series 297 Enviro-Glaze.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.08: INTERIOR CONCRETE FLOORING (CONTINUED)

System Number	PR.08.03
Description	Moderate Abuse, Functional
Type	Aggregate-Filled 100% Solids Epoxy
Surface Preparation	SSPC-SP13 / NACE 6, ICRI CSP 3 or greater*
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT**
Intermediate	Series 237 Power-Tread (double broadcast or slurry/broadcast) at 1/8 in. (3.2 mm) DFT***
Grout / Intermediate	Series 280 or 281 Tneme-Glaze at 8.0 - 10.0 mils DFT****
Finish Coat	Series 280 or 281 Tneme-Glaze at 8.0 - 12.0 mils DFT****
Total DFT	Nominal 1/8 inch system

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
**For moisture content up to 15 lbs per 1,000 sq. ft. or relative humidity up to 95%, Series 208 may be substituted for the primer.
***Use Series 206 over primer where a crack-bridging membrane is needed.
****For superior color and gloss retention, and stain and abrasion-resistance, Series 280 or 281 may be topcoated with Series 247 or 248 EverThane, Series 290 or 291 CRU or Series 297 Enviro-Glaze.

System Number	PR.08.04
Description	Severe to Moderate Abuse, Decorative Topping
Type	Color Quartz-Filled 100% Solids Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 3 or greater*
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT**
Intermediate	Series 222 Deco-Tread (double broadcast or slurry/broadcast) at 1/8 in. (3.2 mm) DFT***
Grout / Intermediate	Series 284 Deco-Clear at 8.0 - 10.0 mils DFT****
Finish Coat	Series 284 Deco-Clear at 8.0 - 10.0 mils DFT****
Total DFT	Nominal 1/8 inch system

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
**Use Series 206 over primer where a crack-bridging membrane is needed.
***Slurry/broadcast applications require Series 201 as primer. (Standard double broadcast application is self-priming).
****Topcoat with Series 285 for an orange-peel finish. For added stain and abrasion-resistance, Series 222 may be topcoated with Series 247, 248, 294, 295 or 296.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.08: INTERIOR CONCRETE FLOORING (CONTINUED)

System Number	PR.08.05
Description	Severe to Moderate Abuse, Decorative Topping
Type	Color Flake-Filled 100% Solids Epoxy
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 3 or greater*
Primer	Series 201 Epoxoprime at 8.0 - 10.0 mils DFT**
Primer	Series 281 Tneme-Glaze at 8.0 - 10.0 mils DFT
Intermediate	Series 224 Deco-Flake (broadcast flake randomly or to refusal)
Finish Coat	Series 284 Deco-Clear at 8.0 - 10.0 mils DFT***
Total DFT	24.0 - 30.0 mils

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
**Use Series 206 over primer where a crack-bridging membrane is needed.
***Topcoat with Series 285 for an orange-peel finish. For added stain and abrasion-resistance, Series 224 may be topcoated with Series 247, 248, 294, 295 or 296.

System Number	PR.08.06
Description	Thin Film Floor System - Chemical Resistance Urethane
Type	Epoxy / Epoxy / Polyurethane
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 3 or greater*
Primer	Series 201 Epoxoprime at 6.0 - 12.0 mils DFT
Intermediate	Series 237 Power-Tread at 8.0 - 16.0 mils DFT
Finish Coat	Series 290 CRU at 2.0 - 3.0 mils DFT
Total DFT	16.0 - 31.0 mils

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.09: MORTAR SYSTEMS

System Number	PR.09.01
Description	Heavy Abuse, Wet, Chemical Contact
Type	Epoxy Mortar
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 3 or greater*
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT**
Intermediate	Series 237 Power-Tread (trowel applied) at 1/4 in. (6.4 mm) DFT
Grout Coat	Series 237 Power-Tread at 6.0 - 12.0 mils DFT
Finish Coat	Series 280 Tneme-Glaze or Series 282 Tneme-Glaze at 8.0 - 12.0 mils DFT
Total DFT	Nominal 1/4 inch system

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
**Use Series 206 over primer where a crack-bridging membrane is needed.

System Number	PR.09.02
Description	Severe Exposure, Chemical Containment
Type	Fiberglass Reinforced 100% Solids Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 5*
Filler / Surfacer	Series 215 Surfacing Epoxy or Series 218 MortarClad (if needed)
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT
Basecoat	Series 239SC ChemBloc (mortar) at 60.0 - 80.0 mils DFT
Reinforcement Mat	Series 211-215 Reinforcing Mat, 3/4 oz. embedded into wet Series 239SC ChemBloc
Saturant	Series 239SC ChemBloc (resin) at 8.0 - 12.0 mils DFT
Finish Coat	Series 282 Tneme-Glaze at 6.0 - 8.0 mils DFT
Total DFT	80.0 - 100.0 mils (plus filler)

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.10: HIGH SERVICE MORTAR SYSTEMS

System Number	PR.10.01A
Description	Pouring, Casting, Vibration Dampening
Type	Polymer Concrete
Surface Preparation	Reference Series 469 LavaCrete Application Guide for surface preparation requirements. Consult with your Tnemec Representative for specific product selection.
Series 469 LavaCrete®	Epoxy polymer concrete for casting trenches, sumps and vibration dampening.
Total DFT	0.375 in. - 8 in. (9.5 - 203 mm) in a single application

System Number	PR.10.01B
Description	Pouring, Casting, Vibration Dampening
Type	Polymer Concrete
Surface Preparation	Reference Series 479 LavaCrete Application Guide for surface preparation requirements. Consult with your Tnemec Representative for specific product selection.
Series 479 LavaCrete®	Novolac epoxy polymer concrete for casting trenches, sumps and vibration dampening.
Total DFT	0.375 in. - 8 in. (9.5 - 203 mm) in a single application

System Number	PR.10.01C
Description	Pouring, Casting, Vibration Dampening
Type	Polymer Concrete
Surface Preparation	Reference Series 489 LavaCrete Application Guide for surface preparation requirements. Consult with your Tnemec Representative for specific product selection.
Series 489 LavaCrete®	Vinyl ester polymer concrete for casting trenches, sumps and vibration dampening.
Total DFT	0.375 inch - 8 in. (9.5 - 203 mm) in a single application

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.10: HIGH SERVICE MORTAR SYSTEMS (CONTINUED)

System Number	PR.10.02
Description	Severe Exposure, Secondary Containment, Acid, Caustic and EO/PO Service
Type	Vinyl Ester Mortar / Glass Mat & Saturant / Vinyl Ester
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI 3-9
Primer	Series 1402 ProPolymer at 6.0 - 8.0 mils DFT
Spot Repairs	Series 1402 ProPolymer with 20 - 30 lbs (9.1 - 13.6 kg) Series 211-9111 Bulking Powder to fill holes and cavities
Basecoat	Series 1415 Vinester with 20 - 25 lbs (9.1 - 11.3 kg) Series 211-9111 (mortar bed coat) at 50.0 - 60.0 mils DFT
Glass Mat / Saturant	Series 211-226 & 227 Fiberglass Mat at 20.0 - 30.0 mils DFT and Series 1415 Vinester at 45 - 65 ft^2 (4.2 - 6.0 m^2) per gallon
Topcoat	Series 1415 Vinester with Series 1400 Color Pack at 10.0 - 20.0 mils DFT or 65 - 135 ft^2 (6.0 - 12.5 m^2) per gallon
Total DFT	Nominal 90.0 mils

System Number	PR.10.03
Description	Severe Exposure, Heavy Traffic or Abuse, Wet, Chemical Contact, Thermal Shock
Type	Polyurethane Modified Concrete
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 5 or greater
Topping System	Series 245 Ultra-Tread S (slurry) at 1/4 in. (6.4 mm) (minimum 3/16 in. (4.8 mm), maximum 1/2 in. (12.7 mm)) DFT
Finish Coat	Series 246 Ultra-Tread Glaze at 8.0 - 10.0 mils DFT
Total DFT	Nominal 1/4 inch system

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PR.11: INTERIOR CEILINGS

System Number	PR.11.01
Description	Metals, Concrete, Plaster or Wood
Type	Mildew-Resistant Specialized Elastomeric Waterborne Acrylate
Surface Preparation	Concrete: SSPC-SP13 / NACE 6 Plaster & Wood: Clean and Dry All Other Substrates: Clean and Dry
Primer	Series 151-1051 Elasto-Grip FC at 1.0 - 2.5 mils DFT
Intermediate	Series 158 Bio-Lastic at 6.0 - 8.0 mils DFT
Finish Coat	Series 158 Bio-Lastic at 6.0 - 8.0 mils DFT
Total DFT	13.0 - 18.5 mils

System Number	PR.11.02
Description	Galvanized Steel - Overhead Deck, Ductwork, Conduit, Dry
Type	Acrylic
Surface Preparation	Contact Tnemec for Recommendation
Finish Coat (2 coats)	Series 115 Uni-Bond DF at 2.0 - 3.5 mils DFT
Total DFT	4.0 - 7.0 mils

PR.12: EXTERIOR STEEL

System Number	PR.12.01
Description	Mild Atmospheric
Type	Alkyd / Acrylic / Acrylic
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series V10 Tnemec Primer at 2.0 - 3.5 mils DFT
Intermediate	Series 1028 or 1029 Enduratone at 2.0 - 3.0 mils DFT*
Finish Coat	Series 1028 or 1029 Enduratone at 2.0 - 3.0 mils DFT*
Total DFT	6.0 - 9.5 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.12: EXTERIOR STEEL (CONTINUED)

System Number	PR.12.02
Description	Mild Atmospheric, Dryfall Spray Application
Type	Acrylic / Acrylic / Acrylic
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 115 Uni-Bond DF or Series 30 Spra-Saf EN at 2.0 - 4.0 mils DFT
Intermediate	Series 30 Spra-Saf EN at 2.0 - 4.0 mils DFT
Finish Coat	Series 30 Spra-Saf EN at 2.0 - 4.0 mils DFT
Total DFT	6.0 - 12.0 mils

System Number	PR.12.03
Description	Mild Atmospheric, Chemical, UV Exposure
Type	Epoxy / Epoxy / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 4.0 - 6.0 mils DFT*
Intermediate	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 2.0 - 3.0 mils DFT*
Finish Coat	Series 73, 1094 or 1095 Endura-Shield or Series 1077 Enduralume at 2.0 - 5.0 mils DFT
Total DFT	8.0 - 14.0 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.

System Number	PR.12.04
Description	Moderate Atmospheric
Type	Acrylic / Acrylic / Acrylic
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 118 Uni-Bond Mastic at 6.0 - 8.0 mils DFT
Intermediate	Series 1028 or 1029 Enduratone at 2.0 - 3.0 mils DFT
Finish Coat	Series 1028 or 1029 Enduratone at 2.0 - 3.0 mils DFT
Total DFT	10.0 - 14.0 mils

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PR.12: EXTERIOR STEEL (CONTINUED)

System Number	PR.12.05
Description	Aggressive Corrosion, Standard UV Protection, Chemical, Physical Abuse
Type	Zinc-Rich Urethane / Epoxy / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 2.0 - 3.0 mils DFT*
Finish Coat	Series 73, 1094 or 1095** Endura-Shield or Series 1077 Enduralume at 2.0 - 5.0 mils DFT**
Total DFT	6.5 - 11.5 mils

*Brush or roller application may require additional coats to achieve recommended film thickness.
**For additional protection and extension of long-term weathering qualities, specify Series 1094U (gloss) or 1095U (semi-gloss).

System Number	PR.12.06
Description	Aggressive Corrosion, Standard UV Protection, Chemical, Physical Abuse
Type	Zinc-Rich Urethane / Epoxy Mastic / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series 132 ProTuff Mastic at 3.0 - 5.0 mils DFT
Finish Coat	Series 1094 or 1095 Endura-Shield at 2.0 - 5.0 mils DFT
Total DFT	7.5 - 13.5 mils

System Number	PR.12.07
Description	Aggressive Corrosion, Extended UV Protection
Type	Zinc-Rich Urethane / Epoxy / Fluoropolymer
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 2.0 - 3.0 mils DFT
Finish Coat	Series 1070, 1071, 1072 or 1078 Fluoronar at 2.0 - 3.0 mils DFT
Total DFT	6.5 - 9.5 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.12: EXTERIOR STEEL (CONTINUED)

System Number	PR.12.08
Description	Marginally Prepared Surfaces (Maintenance)*
Type	Epoxy or MIO-Zinc Urethane / Epoxy / Epoxy
Surface Preparation	Contact Tnemec for recommendations*
Primer	Series 135 Chembuild at 4.0 - 6.0 mils DFT or Series 394 PerimePrime at 2.5 - 3.5 mils DFT
Intermediate	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy at 2.0 - 3.0 mils DFT**
Finish Coat	Series N69 Hi-Build Epoxoline II at 3.0 - 5.0 mils DFT**
Total DFT	8.5 - 13.5 mils or 10.0 - 16.0 mils

*System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations.
**Brush or roller application may require additional coats to achieve recommended film thickness.

System Number	PR.12.09
Description	Marginally Prepared Surfaces, Low Temperature Cure
Type	Epoxy / Epoxy / Epoxy
Surface Preparation	Contact Tnemec for Recommendation
Primer	Series 133 ProTuff Aluminum at 4.0 - 6.0 mils DFT
Intermediate	Series 138 ProTuff at 4.0 - 6.0 mils DFT
Finish Coat	Series 138 ProTuff at 4.0 - 6.0 mils DFT
Total DFT	12.0 - 18.0 mils

System Number	PR.12.10
Description	Marginally Prepared Surfaces
Type	Epoxy or Acrylic / Epoxy / Epoxy
Surface Preparation	Contact Tnemec for Recommendation
Primer	Series 135 ChemBuild at 4.0 - 6.0 mils DFT or Series 118 Uni-Bond Mastic at 6.0 - 8.0 mils DFT
Intermediate	Series N69 Hi-Build Epoxoline II at 3.0 - 5.0 mils DFT
Finish Coat	Series N69 Hi-Build Epoxoline II at 3.0 - 5.0 mils DFT
Total DFT	10.0 - 16.0 mils or 9.0 - 18.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.12: EXTERIOR STEEL (CONTINUED)

System Number	PR.12.11
Description	Weathered Exterior Coatings*
Type	Waterbased Epoxy / Acrylate / Acrylate
Surface Preparation	SSPC-SP13 / NACE 6, Clean and Dry
Primer	Series 151-1051 Elasto-Grip FC at 1.0 - 2.5 mils DFT
Intermediate	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Finish Coat	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Total DFT	9.0 - 18.5 mils

*System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations.

System Number	PR.12.12
Description	Aggressive Corrosion - Roll / Spray Over Abrasive Blasted Steel or Overcoat System
Type	Epoxy Mastic / Epoxy Mastic / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 3 For Overcoat System, Contact Tnemec
Primer	Series 133 ProTuff Aluminum at 4.0 - 6.0 mils DFT
Intermediate	Series 132 ProTuff Mastic at 4.0 - 6.0 mils DFT
Finish Coat	Series 1094 or 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	10.0 - 15.0 mils

System Number	PR.12.13
Description	Acrylic Overcoat System
Type	Acrylic / Acrylic Polymer
Surface Preparation	SSPC-SP2/3
Primer	Series 118 Uni-Bond Mastic at 6.0 - 8.0 mils DFT
Finish Coat	Series 1028 Enduratone at 2.0 - 3.0 mils DFT
Total DFT	8.0 - 11.0 mils

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PR.12: EXTERIOR STEEL (CONTINUED)

System Number	PR.12.14
Description	Exterior Steel Maintenance
Type	Acrylic / Acrylic Polymer
Surface Preparation	SSPC-SP2/3
Primer	Series 1 Omnithane at 2.5 - 3.5 mils DFT
Finish Coat	Series 73 Endura-Shield at 2.0 - 5.0 mils DFT (optional two coats)
Total DFT	6.5 - 13.5 mils

System Number	PR.12.15
Description	Aggressive Corrosion, Extended UV Protection Exterior Water Cooling Tower Structural Steel & Piping
Type	Zinc-Rich Urethane / Epoxy / Acrylic Urethane
Surface Preparation	SSPC-SP10/NACE 2 Near White Blast
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series L69, N69 or V69 Hi-Build Epoxoline II at 6.0 - 8.0 mils DFT
Finish Coat	Series 73U Endura-Shield at 3.0 - 4.0 mils DFT
Total DFT	11.5 - 15.5 mils

System Number	PR.12.16
Special Qualifications	**Coating system is tested in accordance with ISO 12944-6 (2018)***
Description	Aggressive Corrosion, Exterior Water Cooling Tower Structural Steel & Piping
Type	Zinc-Rich Urethane / Epoxy / Acrylic Urethane
Surface Preparation	SSPC-SP10/NACE 2 Near White Blast
Primer	Series 90-97 Tneme-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series L69 Hi-Build Epoxoline II at 6.0 - 8.0 mils DFT
Finish Coat	Series 73 Endura-Shield at 3.0 - 4.0 mils DFT
Total DFT	11.5 - 15.5 mils

*TR7329-A. Contact your Tnemec representative for more information.

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PR.13: EXTERIOR CONCRETE & MASONRY

System Number	PR.13.01
Description	Mild to Moderate
Type	Siloxane / Acrylic Stain
Surface Preparation	SSPC-SP13 / NACE 6
Primer	Series 662 Prime-A-Pell Plus at DFT Penetrant*
Intermediate	Series 607 Conformal Stain at 0.5 - 2.5 mils DFT
Finish Coat	Series 607 Conformal Stain at 0.5 - 2.5 mils DFT (may be required for complete hide)
Total DFT	1.0 - 5.0 mils

*Actual film thickness of the spreading rate will depend on the porosity of the substrate.

System Number	PR.13.02
Description	Mild to Moderate
Type	Acrylic / Acrylic
Surface Preparation	SSPC-SP13 / NACE 6
Primer	Series 180 or 181 W.B. Tneme-Crete at 4.0 - 8.0 mils DFT
Finish Coat	Series 180 or 181 W.B. Tneme-Crete at 4.0 - 8.0 mils DFT
Total DFT	8.0 - 16.0 mils

System Number	PR.13.03
Description	Moderate to Severe for Graffiti Protection
Type	RTV Silicone
Surface Preparation	SSPC-SP13 / NACE 6
Primer	Series 626 Dur A Pell GS at 125 - 150 ft^2 (11.6 - 13.9 m^2) per gallon
Finish Coat	Series 626 Dur A Pell GS at 125 - 150 ft^2 (11.6 - 13.9 m^2) per gallon
Total DFT	62.5 - 75.0 ft^2 (5.8 - 6.9 m^2) per gallon

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PR.13: EXTERIOR CONCRETE & MASONRY (CONTINUED)

System Number	PR.13.04
Description	Moderate to Severe
Type	Acrylate / Acrylate
Surface Preparation	SSPC-SP13 / NACE 6
Primer	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT or Series 157 Enviro-Crete at 6.0 - 9.0 mils DFT
Finish Coat	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT or Series 157 Enviro-Crete at 6.0 - 9.0 mils DFT
Total DFT	8.0 - 16.0 mils or 12.0 - 18.0 mils

*Actual film thickness of the spreading rate will depend on the porosity of the substrate.

PR.14: EXTERIOR STUCCO

System Number	PR.14.01
Description	Elastomeric Protection
Type	Waterbased Epoxy / Acrylate / Acrylate
Surface Preparation	SSPC-SP13 / NACE 6, Clean and Dry
Primer	Series 151-1051 Elasto-Grip FC at 1.0 - 2.5 mils DFT
Intermediate	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Finish Coat	Series 156 Enviro-Crete at 4.0 - 8.0 mils DFT
Total DFT	9.0 - 18.5 mils

*System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.15: STEEL PROCESSING EQUIPMENT

System Number	PR.15.01
Description	CUI, Thermal Efficiency, Safe Touch and Condensation Control / Insulative
Type	Waterbased Epoxy / Insulative Coating
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1224 Epoxoline WB at 6.0 - 8.0 mils DFT
Intermediate	Series 971 Aerolon Acrylic, DFT dependent upon service conditions.
Finish Coat	Series 1095 Endura-Shield at 2.0 - 4.0 mils DFT
Total DFT	System is dependent upon service conditions. Contact your Tnemec Representative for recommended thickness.

*Actual film thickness of the spreading rate will depend on the porosity of the substrate.

System Number	PR.15.02
Description	Marginally Prepared, Surface Tolerant, Low-Temperature / Damp Surfaces
Type	Epoxy Mastic / Epoxy Mastic / Epoxy or Polyurethane
Surface Preparation	SSPC-SP4 / NACE WJ4 and/or SSPC-SP2 / 3
Primer	Series 133 ProTuff Aluminum at 4.0 - 6.0 mils DFT
Intermediate	Series 132 ProTuff Mastic at 4.0 - 6.0 mils DFT
Finish Coat	Series 138 ProTuff at 3.0 - 5.0 mils DFT
Finish Coat (UV stable)	Series 1094 or 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	13.0 - 20.0 mils

*Actual film thickness of the spreading rate will depend on the porosity of the substrate.

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.16: INTERIOR TANKS, VESSELS, FILTERS, ETC.

System Number	PR.16.01
Special Qualifications	ANSI/NSF Std. 61 Compliant Lining
Description	Potable, Fire, Condenser Water Boxes, Demineralized Water Tanks, Make-Up Water Service to 35°F (2°C) Cure (Thin-Film Build)
Type	Low-Temperature Cure Epoxy / Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer (Optional)	Series N140 Pota-Pox Plus at 2.0 - 4.0 mils DFT
Stripe Coat	Series N140 Pota-Pox Plus at 2.0 - 4.0 mils DFT
Intermediate	Series N140 Pota-Pox Plus at 4.0 - 6.0 mils DFT
Finish Coat	Series N140 Pota-Pox Plus at 4.0 - 6.0 mils DFT
Total DFT	12.0 - 20.0 mils

System Number	PR.16.02
Description	Natural Gas Pipe Interior Lining
Type	Amine Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Finish Coat	Series 61 Tneme-Liner at 4.0 - 6.0 mils DFT
Total DFT	4.0 - 6.0 mils

System Number	PR.16.03
Description	Cycloaliphatic Amine Epoxy Lining with Excellent Corrosion and Chemical Resistance Lining Recommended for Water, Wastewater Service, and Demineralized Water Tanks
Type	Amine Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer	Series 61 Tneme-Liner at 4.0 - 6.0 mils DFT
Intermediate	Series 61 Tneme-Liner at 4.0 - 6.0 mils DFT
Finish Coat	Series 61 Tneme-Liner at 4.0 - 6.0 mils DFT
Total DFT	12.0 - 18.0 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.16: INTERIOR TANKS, VESSELS, FILTERS, ETC. (CONTINUED)

System Number	PR.16.04
Description	100% Solids High Build Epoxy with Excellent Resistance to High Abrasion and Chemical Resistance. NSF Approved for Potable Water Service.
Type	Polyamine Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Finish Coat	Series 22 Epoxoline at 16.0 - 40.0 mils DFT
Total DFT	16.0 - 40.0 mils

System Number	PR.16.05
Description	100% Solids, Epoxy for Aggressive Chemicals - Single Leg Application Option-Dewatering Tanks
Type	Polyamine Epoxy
Surface Preparation	SSPC-SP10 / ISO Sa3
Finish Coat	Series 370 Tank Armor at 20.0 - 40.0 mils DFT
Total DFT	20.0 - 40.0 mils

System Number	PR.16.06
Special Qualifications	**NSF/ANSI/CAN Std. 61 Compliant Lining**
Description	Single Component, Moisture Cured Urethane, Zinc Rich Primer
Type	Urethane / Polyamide Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer	Series 94-H_2O Hydro-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series L140, N140, V140 Pota-Pox Plus at 4.0 - 6.0 mils DFT
Finish Coat	Series L140, N140, V140 Pota-Pox Plus at 4.0 - 6.0 mils DFT
Total DFT	10.5 - 15.5 mils

Carefully review product data sheets, along with related application guides, at www.tnemec.com. Systems outlined in this guide are commonly used, however other system options are available depending on VOC regulations, application technique, aesthetics, and performance requirements. Review the coating system with a Tnemec Representative prior to final selection. Reference Tnemec's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PR.17: STEEL - SEVERE CORROSION HYDROGEN SULFIDE

System Number	PR.17.01
Description	Interior Exposed
Type	Epoxy / Epoxy
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series N69 Hi-Build Epoxoline at 3.0 - 5.0 mils DFT
Finish Coat	Series N69 Hi-Build Epoxoline at 3.0 - 5.0 mils DFT
Total DFT	6.0 - 10.0 mils

System Number	PR.17.02
Description	Interior / Immersion Severe H_2S Vapor Exposure
Type	Modified Polyamine Epoxy
Surface Preparation	SSPC-SP5 / NACE 1
Primer (Optional)	Series 435 Perma-Glaze at 15.0 - 20.0 mils DFT
Finish Coat	Series 435 Perma-Glaze at 15.0 - 20.0 mils DFT
Total DFT	30.0 - 40.0 mils

PR.18: STEEL - STRUCTURAL, TANKS, PIPES & EQUIPMENT

System Number	PR.18.01
Description	Interior / Immersion Severe
Type	Vinyl Ester / Vinyl Ester
Surface Preparation	SSPC-SP5 / NACE 1
Primer	Series 120-5002 Vinester at 12.0 - 18.0 mils DFT
Finish Coat	Series 120-5001 Vinester at 12.0 - 18.0 mils DFT
Total DFT	24.0 - 36.0 mils

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PR.18: STEEL - STRUCTURAL, TANKS, PIPES & EQUIPMENT (CONTINUED)

System Number	PR.18.02
Description	Immersion
Type	Epoxy / Coal Tar Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer (Optional)	Series N69 Hi-Build Epoxoline II at 3.0 - 5.0 mils DFT
Finish Coat	Series 46H-413 Hi-Build Tneme-Tar at 14.0 - 20.0 mils DFT
Total DFT	17.0 - 25.0 mils

System Number	PR.18.03
Description	100% Solids - Abrasion Resistance Lining
Type	Modified Polyamine Ceramic Epoxy
Surface Preparation	SSPC-SP5 / NACE 1
Finish Coat	Series 431 Perma-Shield PL at 30.0 - 50.0 mils DFT
Total DFT	30.0 - 50.0 mils

System Number	PR.18.04
Description	100% Solids - Abrasion Resistance Lining
Type	Modified Polyamine Epoxy
Surface Preparation	SSPC-SP5 / NACE 1
Finish Coat	Series 435 Perma-Glaze at 30.0 - 40.0 mils DFT
Total DFT	30.0 - 40.0 mils Potable Water Immersion Lining

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PR.18: STEEL - STRUCTURAL, TANKS, PIPES & EQUIPMENT (CONTINUED)

System Number	PR.18.05
Special Qualifications	NSF/ANSI/CAN Std. 61 Compliant Lining
Description	Potable Water Immersion Lining
Type	Polyamidoamine Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer (Optional)	Series 94-H_2O Hydro-Zinc at 2.5 - 3.5 mils DFT
Intermediate	Series N140 Pota-Pox Plus at 4.0 - 6.0 mils DFT
Finish Coat	Series N140 Pota-Pox Plus at 4.0 - 6.0 mils DFT
Total DFT	8.0 - 12.0 mils or 10.5 - 15.5 mils

System Number	PR.18.06
Description	Epoxy Lining
Type	Polyamide Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Finish Coat	Series 66 Hi-Build Epoxoline at 4.0 - 6.0 mils DFT
Finish Coat	Series 66 Hi-Build Epoxoline at 4.0 - 6.0 mils DFT
Finish Coat	Series 66 Hi-Build Epoxoline at 4.0 - 6.0 mils DFT
Total DFT	12.0 - 18.0 mils DFT

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PR.19: CORROSION UNDER INSULATION

System Number	PR.19.01
Description	Under Insulation - Rehabilitation up to 300°F (149°C)
Type	Direct-to-Metal / Vinyl Ester, Spray or Roll
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
First Coat	Series 1436 Vinester at 10.0 - 15.0 mils DFT
Second Coat	Series 1436 Vinester at 10.0 - 15.0 mils DFT
Total DFT	20.0 - 30.0 mils

System Number	PR.19.02
Description	Under Insulation - Rehabilitation up to 300°F (149°C)
Type	Direct-to-Metal / Aluminum Epoxy Mastic, Spray or Roll
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
First Coat	Series 133 ProTuff Aluminum at 5.0 - 8.0 mils DFT
Second Coat	Series 133 ProTuff Aluminum at 5.0 - 8.0 mils DFT
Total DFT	10.0 - 16.0 mils

System Number	PR.19.03
Description	Under Insulation - Rehabilitation up to 400°F (204°C)
Type	Direct-to-Metal / Vinyl Ester, Trowel Grade
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
First Coat	Series 1428 Vinester at 30.0 - 50.0 mils DFT
Second Coat	Series 1428 Vinester at 30.0 - 50.0 mils DFT
Total DFT	60.0 - 100.0 mils

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PR.19: CORROSION UNDER INSULATION (CONTINUED)

System Number	PR.19.04
Description	Under Insulation - Rehabilitation up to 400°F (204°C)
Type	Direct-to-Metal / Vinyl Ester, Spray or Roll
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
First Coat	Series 1438 Vinester at 10.0 - 15.0 mils DFT
Second Coat	Series 1438 Vinester at 10.0 - 15.0 mils DFT
Total DFT	20.0 - 30.0 mils

System Number	PR.19.05
Description	Insulation Coating with Aerogel Technology
Type	Fluid-applied acrylic insulation coating
Surface Preparation	Contact Tnemec for recommendations
Finish Coat	Series 971 Aerolon at 30.0 - 50.0 mils DFT
Total DFT	30.0 - 50.0 mils

PR.20: SPECIALTY WALL SYSTEMS

System Number	PR.20.01
Description	Odor-Free, Color Stable, High Performance Wall, Severe to Moderate Duty
Type	Epoxy / Modified Polyamine Epoxy / Waterborne Aliphatic Polyurethane
Surface Preparation	Clean and Dry
Filler / Surfacer	Series 215 Surfacing Epoxy as needed
Primer	Series 280 Tneme-Glaze at 4.0 - 6.0 mils DFT
Intermediate	Series 280 Tneme-Glaze at 4.0 - 6.0 mils DFT
Finish Coat	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT
Total DFT	10.0 - 15.0 mils (plus filler)

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PR.20: SPECIALTY WALL SYSTEMS (CONTINUED)

System Number	PR.20.02
Description	Odor-Free, Color Stable, Dense or Non-Porous Substrates, Severe to Moderate Duty
Type	Waterborne Epoxy / Ceramic Modified Polyurethane
Surface Preparation	Clean and Dry
Primer	Series 151-1051 Elasto-Grip FC at 1.0 - 2.0 mils DFT
Intermediate	Series 287 Enviro-Pox at 2.0 - 3.0 mils DFT
Finish Coat	Series 297 Enviro-Glaze at 2.0 - 3.0 mils DFT
Total DFT	5.0 - 8.0 mils

PR.21: INSULATED PIPE

System Number	PR.21.01
Description	Interior / Exterior Exposed, Moderate to Mild Duty
Type	Acrylic / Acrylic
Surface Preparation	Clean and Dry
Primer	Series 115 Uni-Bond DF or Series 30 Spra-Saf EN at 2.0 - 3.0 mils DFT
Finish Coat	Series 1026, 1028, 1029 Enduratone or Series 30 Spra-Saf EN at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils

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PR.22: FGD LININGS

System Number	PR.22.01
Description	Vinyl Ester Flake Glass Trowel - Optional Reinforcement
Type	Vinyl Ester / Epoxy Vinyl Ester / Epoxy Vinyl Ester
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 2.0 - 6.0 mils DFT
Intermediate	Series 1420 ProPolymer at 30.0 - 60.0 mils DFT
Finish Coat	Series 1420 ProPolymer at 30.0 - 60.0 mils DFT
Total DFT	62.0 - 126.0 mils

System Number	PR.22.02
Description	Vinyl Ester Flake Glass Trowel with Spray Topcoat
Type	Epoxy Vinyl Ester / Epoxy Vinyl Ester
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1420 ProPolymer at 30.0 - 60.0 mils DFT
Finish Coat	Series 1430 ProPolymer at 10.0 - 25.0 mils DFT
Total DFT	40.0 - 85.0 mils

System Number	PR.22.03
Description	Vinyl Ester Flake Glass Trowel Elevated Temperature - Optional Reinforcement
Type	Novolac Vinyl Ester
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1428 Vinester at 30.0 - 80.0 mils DFT
Finish Coat	Series 1428 Vinester at 30.0 - 80.0 mils DFT
Total DFT	60.0 - 160.0 mils

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PR.22: FGD LININGS (CONTINUED)

System Number	PR.22.04
Description	Glass Flake Vinyl Ester (Elevated Temperatures) with Topcoat
Type	Novolac Vinyl Ester / Epoxy Novolac Vinyl Ester
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1428 Vinester (spray) at 30.0 - 80.0 mils DFT
Finish Coat	Series 1436 Vinester (spray) at 12.0 - 50.0 mils DFT
Total DFT	42.0 - 130.0 mils

System Number	PR.22.05
Description	Glass Flake Vinyl Ester (Ultra Elevated Temperatures) with Abrasive Resistance Topcoat)
Type	Novolac Vinyl Ester / Novolac Vinyl Ester
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1428 Vinester (trowel) at 30.0 - 80.0 mils DFT
Finish Coat	Series 1439 Vinester (trowel) at 15.0 - 50.0 mils DFT
Total DFT	45.0 - 130.0 mils

System Number	PR.22.06
Description	150-Mil Glass Roving Reinforced System
Type	Reinforced Vinyl Ester
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 5 or greater or SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 4.0 - 6.0 mils DFT
First Coat	Series 1415 Vinester with Series 211-9111 Bulking Powder at 60.0 mils DFT
Glass Mat	Series 211-228 Woven Roving
Second Coat	Series 1416 Vinester at 20.0 mils DFT
Finish Coat	Series 1416 Vinester with Series 211-9111 Bulking Powder at 60.0 mils DFT
Total DFT	Nominal 150.0 mils

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PR.22: FGD LININGS (CONTINUED)

System Number	PR.22.07
Description	150-Mil Glass Roving Reinforced System - Elevated Temperature
Type	Reinforced Vinyl Ester
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 5 or greater or SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 4.0 - 6.0 mils DFT
First Coat	Series 1416 Vinester with Series 211-9111 Bulking Powder at 60.0 mils DFT
Glass Mat	Series 211-228 Woven Roving
Second Coat	Series 1416 Vinester at 20.0 mils DFT
Finish Coat	Series 1416 Vinester with Series 211-9111 Bulking Powder at 60.0 mils DFT
Total DFT	Nominal 150.0 mils

System Number	PR.22.08
Description	Severe Exposure, Chemical Containment
Type	Fiberglass Reinforced 100% Solids Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 5*
Filler / Surfacer	Series 215 Surfacing Epoxy or Series 218 MortarClad (if needed)
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT
Basecoat	Series 239SC ChemBloc (mortar) at 60.0 - 80.0 mils DFT
Reinforcement Mat	Series 211-215 Reinforcing Mat, 3/4 oz. embedded into wet Series 239SC ChemBloc
Saturant	Series 239SC ChemBloc (resin) at 8.0 - 12.0 mils DFT
Finish Coat	Series 282 Tneme-Glaze at 6.0 - 8.0 mils DFT
Total DFT	80.0 - 100.0 mils (plus filler)

*Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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PR.22: FGD LININGS (CONTINUED)

System Number	PR.22.09
Description	Severe Exposure, Chemical Containment
Type	Fiberglass Reinforced 100% Solids Epoxy
Surface Preparation	SSPC-SP13 / NACE 6 - ICRI CSP 5
Filler / Surfacer	Series 215 Surfacing Epoxy or Series 218 MortarClad (if needed)
Primer	Series 201 Epoxoprime at 6.0 - 8.0 mils DFT
Basecoat	Series 239SC ChemBloc (mortar) at 60.0 - 80.0 mils DFT
Reinforcement Mat	Series 211-215 Reinforcing Mat, 3/4 oz. embedded into wet Series 239SC ChemBloc
Saturant	Series 239SC ChemBloc (resin) at 8.0 - 12.0 mils DFT
Finish Coat	Series 282 Tneme-Glaze at 6.0 - 8.0 mils DFT
Total DFT	80.0 - 100.0 mils (plus filler)

System Number	PR.22.10
Description	Vinyl Ester Flake Filled Spray System
Type	Vinyl Ester: Primer / Flake-filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 3.0 - 5.0 mils DFT
Finish Coat	Series 1430 ProPolymer at 15.0 - 25.0 mils DFT
Second Coat	Series 1430 ProPolymer at 15.0 - 25.0 mils DFT
Total DFT	33.0 - 55.0 mils

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PR.22: FGD LININGS (CONTINUED)

System Number	PR.22.11
Description	Vinyl Ester Glass Flake Filled Elevated Temperature Spray System
Type	Vinyl Ester: Primer / Glass Flake-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 3.0 - 5.0 mils DFT
Finish Coat	Series 1436 Vinester at 15.0 - 25.0 mils DFT
Second Coat	Series 1436 Vinester at 15.0 - 25.0 mils DFT
Total DFT	33.0 - 55.0 mils

System Number	PR.22.12
Description	Vinyl Ester Glass Flake Filled Ultra Elevated Temperature Spray System
Type	Vinyl Ester: Primer /Glass Flake-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 3.0 - 5.0 mils DFT
Finish Coat	Series 1438 Vinester at 15.0 - 25.0 mils DFT
Second Coat	Series 1438 Vinester at 15.0 - 25.0 mils DFT
Total DFT	33.0 - 55.0 mils

System Number	PR.22.13
Description	Vinyl Ester Glass Flake Filled Ultra Elevated Temperature Spray System with Abrasion Resistant Fill
Type	Vinyl Ester: Primer / Glass Flake-Filled / Abrasion Resistance Powder-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1407 Vinester at 3.0 - 5.0 mils DFT
First Coat	Series 1436 Vinester at 15.0 - 25.0 mils DFT
Finish Coat	Series 1439 Vinester at 15.0 - 25.0 mils DFT
Total DFT	33.0 - 55.0 mils

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PR.22: FGD LININGS (CONTINUED)

System Number	PR.22.14
Description	Mild to Moderate Wastewater
Type	Polyurethane / Epoxy
Surface Preparation	SSPC-SP10 / NACE No. 2 Near-White Blast Cleaning
Primer	Series 1 Ominthane at 2.5 - 3.5 mils DFT
Intermediate	Series 104 H.S. Epoxy at 4.0 - 10.0 mils DFT
Finish Coat	Series 104 H.S. Epoxy at 4.0 - 10.0 mils DFT
Total DFT	10.5 - 23.5 mils

System Number	PR.22.15
Description	Mild to Moderate Wastewater
Type	Polyurethane / Polyamine Epoxy
Surface Preparation	SSPC-SP10 / NACE No. 2 Near-White Blast Cleaning
Primer	Series 1 Ominthane at 2.5 - 3.5 mils DFT
Finish Coat	Series 142 Epoxoline at 8.0 - 20.0 mils DFT
Total DFT	10.5 - 23.5 mils

System Number	PR.22.16
Description	Mild to Moderate Wastewater
Type	Polyurethane / Coal Tar Epoxy
Surface Preparation	SSPC-SP10 / NACE No. 2 Near-White Blast Cleaning
Primer	Series 1 Ominthane at 2.5 - 3.5 mils DFT
Intermediate	Series 46H-413 Hi-Build Tneme-Tar at 5.0 - 10.0 mils DFT
Finish Coat	Series 46H-413 Hi-Build Tneme-Tar at 5.0 - 10.0 mils DFT
Total DFT	12.5 - 23.5 mils

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PR.22: FGD LININGS (CONTINUED)

System Number	PR.22.17
Description	Harsh Chemicals
Type	Epoxy Novolac Polymer / Novolac Epoxy
Surface Preparation	SSPC-SP5/NACE No. 5 White Metal Blast
Void Coat	Series 351 Tank Armor at 40.0 mils DFT - 1/4 in (6.4 mm)
Stripe Coat	Series 365 Tank Armor at 20.0 - 60.0 mils DFT
Finish Coat	Series 365 Tank Armor at 20.0 - 60.0 mils DFT
Total DFT	80.0 - 370.0 mils

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