



COATING SYSTEMS FOR

PROCESSING AND

MANUFACTURING FACILITIES

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SELECTION GUIDE

FOOD AND BEVERAGE FACILITIES

The Food and Beverage Facilities 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 is separated by substrates, beginning with masonry/concrete substrates and is followed by steel substrates and processing vessels. Within each section, recommended system numbers will reference the full coating systems within the Processing & Manufacturing 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.

MASONRY/CONCRETE

CMU

Select MICROCLEAN™ systems to meet USDA standards for resistance to bacterial growth and ease of cleaning. Systems offered include: "grout-free" level IV coatings. Typical areas are aseptic batching filling, bottling and wet food process rooms. Dairy and meat processing areas subject to high sanitation, chemical and frequent hot caustic cleaning.

Severe Duty MICROCLEAN™	PM.05.04, PM.05.03, PM.05.05
Moderate Duty	PM.05.01, PM.05.05, PM.22.01
Mild Duty	PM.05.02, PM.07.01, PM.22.02
Surface Tolerant	--
Weatherable	PM.14.02, PM.14.03, PM.14.04
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Drywall, Insulated Metal and Cladding Panels

Meets the challenges of bacterial and vermin control while maintaining the sanitation of these substrates found in all food and beverage plants. Sanitation and kettle cleaning rooms, confectioners, bakeries, microbrewing, and school, hospital and elderly care wash rooms and kitchens.

Severe Duty MICROCLEAN™	PM.07.02, PM.07.03, PM.22.02
Moderate Duty	PM.07.01, PM.22.02, PM.23.01
Mild Duty	PM.05.02, PM.07.01, PM.23.01
Surface Tolerant	--
Weatherable	PM.23.01
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Tilt-Up / Precast

These surfaces are subject to USDA scrutiny and require special finishes to provide the longest protection and best aesthetics as these common building walls become ever more popular. Use these systems on precast in processing and raw food storage, delivery, and wet production areas. Flour, grain and other receiving and process areas.

Severe Duty MICROCLEAN™	PM.05.04, PM.05.06, PM.22.01
Moderate Duty	PM.05.02, PM.22.02
Mild Duty	PM.05.02
Surface Tolerant	--
Weatherable	PM.14.02, PM.14.03, PM.14.04
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Process Floors

Beverage fill lines, keg cleaning, and pasteurization and fruit and vegetable cold press areas. Slaughter, evisceration and by-product areas, brining rooms, baking/steaming/frying areas, and process overflow. High impact and abrasive area where, de-soiling and stone separation and sorting occurs.

Severe Duty MICROCLEAN™	PM.08.03, PM.09.02, PM.10.03
Moderate Duty	PM.08.02, PM.08.03
Mild Duty	--
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

MASONRY/CONCRETE (CONTINUED)

Industrial Floors

Grain, animal and tanker service unload, food/chemical docks, dairy, alcohol, and aseptic fill rooms. Battery charging station room floors. Dissipative and electric static discharge floors. With appropriate topcoats all meet USDA compliance as MICROCLEAN™ systems.

Severe Duty MICROCLEAN™	PM.08.03, PM.08.06, PM.10.03
Moderate Duty	PM.08.02, PM.08.03, PM.09.02
Mild Duty	PM.08.01, PM.08.02
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Decorative Floors

Use these systems to provide a first class representation of your food and beverage plant. From hospital operating theaters to tasting and tap rooms. These floors are not only aesthetically pleasing but are also very chemical-resistant and robust. Use in visitor entries, lunch rooms, quality control and laboratory floors.

Severe Duty MICROCLEAN™	PM.08.03, PM.08.04, PM.08.05
Moderate Duty	PM.08.02, PM.08.05
Mild Duty	PM.08.01
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Containment: Acids

Tank containment dikes, interior and exterior, drum storage, phosphoric, sulfuric and HCL. Sodium hydroxide at elevated temperatures. A minimum of 72 hours of containment with proper joint details.

Severe Duty MICROCLEAN™	PM.10.01C, PM.10.02
Moderate Duty	--
Mild Duty	--
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	PM.10.01C, PM.10.02
Immersion Service Elevated	Project Specific
Spray or Tape Insulation	--

Containment: Caustic / Cleaners

Tank containment dikes, interior and exterior, drum storage, sodium hydroxide, hydrogen peroxide, iodine based chemicals. A minimum of 72 hours of containment with proper joint details.

Severe Duty MICROCLEAN™	PM.09.02, PM.10.01B
Moderate Duty	--
Mild Duty	--
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	PM.09.02, PM.10.01B
Immersion Service Elevated	Project Specific
Spray or Tape Insulation	--

MASONRY/CONCRETE (CONTINUED)

Polymer Concrete

Use polymer concrete to quickly rebuild deteriorated masonry with one single, thick pour. These materials cure hard within hours allowing fast return to service with full chemical resistance. Use to build or restore trenches, pump pads and column bases, under new tanks before setting and as mortar baseplate grouts for vibration dampening.

Severe Duty MICROCLEAN™	PM.10.01A, PM.10.01B, PM.10.01C
Moderate Duty	--
Mild Duty	--
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	PM.10.01A, PM.10.01B, PM.10.01C
Immersion Service Elevated	Project Specific
Spray or Tape Insulation	--

Wastewater: Concrete / Masonry

From influent to effluent, protection and restoration of concrete surfaces exposed to animal and vegetable fats, oils, greases, and spent hot caustic cleaning solutions for the industrial food processing facility. Lift stations, manholes, aerobic and anaerobic digesters, skimming tanks and clarifiers. Immersion Service.

Severe Duty MICROCLEAN™	PM.06.05, PM.06.07, PM.18.02
Moderate Duty	PM.06.04, PM.06.06, PM.18.02
Mild Duty	PM.06.02, PM.06.03
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	All Systems Listed
Immersion Service Elevated	Call for Additional Systems
Spray or Tape Insulation	--

STEEL/FERROUS AND NON-FERROUS

Structural Steel

Shop application systems to save time during erection, on site finishing of steel, structural members and columns requiring USDA compliance for clean-ability. For process, receiving and warehouse facilities. Exterior finish coats for maximum color and gloss retention and impact and chemical resistant interior epoxy finishes for wet and steamy areas. Non-Immersion Service.

Severe Duty MICROCLEAN™	PM.12.06, PM.12.07, PM.12.09, PM.12.12
Moderate Duty	PM.01.06, PM.12.09, PM.12.12
Mild Duty	PM.11.01, PM.12.01, PM.12.02
Surface Tolerant	PM.01.06, PM.12.09
Weatherable	PM.01.05, PM.12.07
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Steel (Overcoat)

Applying fresh coatings over existing paint in relatively good condition provides a cost savings option and faster return to service. Apply to exterior structures that may have lead finishes, apply over service conveyors and food processing equipment to increase clean-ability, use in house maintenance crews to paint handrails, tank legs and frequent contact or cleaned surfaces. Spray systems for ceiling in process or dry areas.

Severe Duty MICROCLEAN™	PM.01.08, PM.12.09, PM.16.03
Moderate Duty	PM.01.06, PM.12.10
Mild Duty	PM.01.02, PM.05.02, PM.12.11
Surface Tolerant	All Systems Listed
Weatherable	PM.16.03
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

STEEL/FERROUS AND NON-FERROUS (CONTINUED)

Galvanized, Aluminum or PVC

Piping (external), conduit, decking over process areas, and electrical boxes and sensitive equipment covers.

Severe Duty MICROCLEAN™	PM.03.01, PM.04.01
Moderate Duty	PM.03.01, PM.04.01, PM.11.02
Mild Duty	PM.03.01, PM.11.02
Surface Tolerant	--
Weatherable	PM.03.01, PM.04.01
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

Steel: Elevated Temperatures

Exterior finishes for high heat equipment, exhaust stacks and heat exchangers. Apply on portions of oil roasting units, impingement, direct sear flame and toaster and spiral ovens and specialty frying units. Non-Immersion Service.

Severe Duty MICROCLEAN™	PM.13.05, PM.13.06
Moderate Duty	PM.13.03, PM.13.04
Mild Duty	PM.13.01, PM.13.02
Surface Tolerant	--
Weatherable	All Systems Listed
High Heat	All Systems Listed
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	See steel surfaces up to 500°F (260°C)

Equipment: Carbon or Stainless

To keep in compliance with USDA standards for cleanable, sanitized and non-bacterial growth surfaces, powder coated, painted and other factory finishes should be kept in good condition. Surface tolerant systems for going over rust, damp surfaces and marginally adhered coatings are available. Use on autoclaves, shaker, sorting and sizing units, flow bins, vertical and incline conveyors, washing machines and packaging equipment. Non-Immersion Service.

Severe Duty MICROCLEAN™	PM.01.08, PM.01.10, PM.12.09
Moderate Duty	PM.01.06, PM.04.01
Mild Duty	PM.01.02, PM.01.06
Surface Tolerant	PM.01.06, PM.03.01
Weatherable	PM.03.01, PM.04.01, PM.16.03
High Heat	See Steel Elevated Temperatures
Immersion Service <120°F (49°C)	See Process Tanks / Vessels
Immersion Service Elevated	See Process Tanks / Vessels
Spray or Tape Insulation	PM.16.01, PM.16.02

PROCESS TANKS, VESSELS & FILTERS

CFR 21 FDA 175.300 Direct Food Contact

Independently tested and certified to comply with "Food Types" and "Conditions" as set forth for direct food contact. Systems are available for elevated temperature conditions and release properties, all with fast return to service. Use in pressure filtration systems, wet corn/starch processing. Fermentation tanks, malting and steeping, wine and citrus storage and molasses processing. Scalding, chill and rinse tanks. Also, dry food silos, sugars and grains.

Severe Duty MICROCLEAN™	PM.17.03, PM.17.05
Moderate Duty	PM.17.02, PM.17.03, PM.17.04
Mild Duty	PM.01.02, PM.02.01
Surface Tolerant	--
Weatherable	--
High Heat	Contact Tnemec Technical Services
Immersion Service <120°F (49°C)	PM.17.02, PM.17.04, Food Type / Condition Specific
Immersion Service Elevated	PM.17.03, PM.17.05 Food Type / Condition Specific
Spray or Tape Insulation	PM.16.01, PM.16.02

PROCESS TANK, VESSELS & FILTERS (CONTINUED)

Non-Food Grade Tanks

For fire control tanks, hot-water make-up and sanitation solution tanks. Tanks for storing or processing waste bio materials, rendering parts and fats. Diesel or fuel storage tanks for generator service. For skimming, oil/grease fat clarifiers and settling tanks, aerobic or anaerobic digesters, wastewater and treatment equipment.

Severe Duty MICROCLEAN™	PM.17.03, PM.18.01, PM.18.02
Moderate Duty	PM.17.02
Mild Duty	PM.17.01, PM.19.02
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	All Systems Listed
Immersion Service Elevated	PM.17.03, Contact Tnemec Technical Service
Spray or Tape Insulation	PM.16.01, PM.16.02

Wastewater: Steel Surfaces

From influent to effluent, protection and restoration of surfaces exposed to animal and vegetable fats, oils, greases, and spent hot caustic cleaning solutions for the industrial food processing facility. Lift stations, manholes, aerobic and anaerobic digesters, skimming tanks and clarifiers. Immersion Service.

Severe Duty MICROCLEAN™	PM.17.02, PM.18.01, PM.19.03
Moderate Duty	PM.02.01, PM.20.01
Mild Duty	PM.19.02, PM.20.02
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	All Systems Listed
Immersion Service Elevated	PM.17.03, Contact Tnemec Technical Service
Spray or Tape Insulation	--

Steel Surfaces Up To 300°F (149°C)

Use for protection of workers from hot surface contact, for thermal energy retention and to eliminate condensation.

Severe Duty MICROCLEAN™	--
Moderate Duty	--
Mild Duty	--
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	PM.16.01, PM.16.02

Coatings Under Insulation

New or pitted steel surfaces and temperatures up to 400°F (204°C), or second system new or minor pitting to 1200°F (649°C). Systems listed below are for protection and/or rehabilitation of deteriorated steel under insulation. Temperatures range from 300°F (149°C) to 1,200°F (649°C). Select appropriate system to match steel conditions and anticipated temperatures.

Severe Duty MICROCLEAN™	PM.19.01, PM.21.03, PM.21.04
Moderate Duty	PM.21.01 (up to 300°F), PM.21.04
Mild Duty	PM.21.02 (up to 300°F)
Surface Tolerant	--
Weatherable	--
High Heat	--
Immersion Service <120°F (49°C)	--
Immersion Service Elevated	--
Spray or Tape Insulation	--

COATING SYSTEMS

FOR PROCESSING AND MANUFACTURING FACILITIES

The following coating systems have been specifically selected based on years of performance in various processing and manufacturing plants, including food and beverage, pharmaceutical and automotive facilities. 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 Temec. To review project needs and discuss alternative coating options, contact a local Temec representative or request more information at tnemec.com.

PM.01: INTERIOR STEEL

System Number	PM.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	PM.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	PM.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.

PM.01: INTERIOR STEEL (CONTINUED)

System Number	PM.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, 1074 or 1075 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.

**For additional protection and extension of long-term weathering qualities, specify Series 1074U (gloss) or 1075U (semi-gloss).

System Number	PM.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	PM.01.06
Description	Surface Tolerant, Low-Temperature / Damp Surfaces (Light Corrosion)
Type	Epoxy Mastic / Epoxy
Surface Preparation	SSPC-SPWJ4 / 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

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.

PM.01: INTERIOR STEEL (CONTINUED)

System Number	PM.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	PM.01.08
Special Qualifications	MICROCLEAN™
Description	Surface Tolerant, Low-Temperature / Damp Surfaces (Heavy Corrosion)
Type	Epoxy Mastic / Epoxy Mastic / Epoxy
Surface Preparation	SSPC-SPWJ4 / 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	PM.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.

PM.01: INTERIOR STEEL (CONTINUED)

System Number	PM.01.10
Special Qualifications	MICROCLEAN™
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, 1074 or 1075 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	8.5 - 12.5 mils

PM.02: INTERIOR STEEL - POTABLE WATER

System Number	PM.02.01
Special Qualifications	AWWA D102 Paint System ICS-3; NSF/ANSI Std. 61 Compliant Lining
Description	Interior, Wet
Type	Zinc-Rich Urethane / Epoxy
Surface Preparation	SSPC-SP10 / NACE 2
Primer	Series 91-H ₂ O or 94-H ₂ O 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

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.

PM.02: INTERIOR STEEL - POTABLE WATER (CONTINUED)

System Number	PM.02.02
Special Qualifications	AWWA D102 Paint System ICS-4; NSF/ANSI Std. 61 Compliant Lining
Description	Interior, Wet
Type	Zinc-Rich Urethane / Polyurethane
Surface Preparation	SSPC-SP10 / NACE 2
Primer	Series 91-H ₂ O or 94-H ₂ O 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

PM.03: INTERIOR GALVANIZED STEEL

System Number	PM.03.01
Special Qualifications	MICROCLEAN™
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.

PM.04: INTERIOR OR EXTERIOR GALVANIZED STEEL

System Number	PM.04.01
Special Qualifications	MICROCLEAN™
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, 1074 or 1075 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.

**For additional protection and extension of long-term weathering qualities, specify Series 1074U (gloss) or 1075U (semi-gloss).

PM.05: INTERIOR CONCRETE, MASONRY & CMU

System Number	PM.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 sq ft/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.

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

System Number	PM.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	PM.05.03
Special Qualifications	MICROCLEAN™
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 sq ft/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.tnemecc.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 Tnemecc Representative prior to final selection. Reference Tnemecc's certified product listing at www.nsf.org for details on the maximum allowable DFT.

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

System Number	PM.05.04
Special Qualifications	MICROCLEAN™
Description	Heavy Abuse
Type	100% Solids Fiber-Reinforced Epoxy
Surface Preparation	Clean and Dry
Bedding Coat	Series 215 Surfacing Epoxy at 1/16" 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-Glazat 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	PM.05.05
Special Qualifications	MICROCLEAN™
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 - 14.0 m ²) per gallon Lightweight Block & CMU: 75 - 100 ft ² (7.0 - 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.

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

System Number	PM.05.06
Special Qualifications	MICROCLEAN™
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.

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

System Number	PM.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

Carefully review product data sheets, along with related application guides, at www.tnemecc.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 Tnemecc Representative prior to final selection. Reference Tnemecc's certified product listing at www.nsf.org for details on the maximum allowable DFT.

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

System Number	PM.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	PM.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

System Number	PM.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 inches
Primer (Optional Resur-facer)	Series 218 MortarClad at 1/16 in - 1/2 in
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

Carefully review product data sheets, along with related application guides, at www.tnemecc.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 Tnemecc Representative prior to final selection. Reference Tnemecc's certified product listing at www.nsf.org for details on the maximum allowable DFT.

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

System Number	PM.06.05
Special Qualifications	MICROCLEAN™
Description	Immersion H ₂ S 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 inches
Primer (Optional Resurfacer)	Series 218 MortarClad at 1/16 in - 1/2 in
Intermediate	Series 434 Perma-Shield H ₂ S at 1/8 in - 125.0 mils
Finish Coat (Optional)	Series 435 Perma-Glaze at 15.0 - 20.0 mils
Total DFT	Nominal 1/8 inch system

System Number	PM.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 inches
Primer	Series N69 Hi-Build Epoxoline at 4.0 - 6.0 mils DFT
Primer (Optional Resurfacer)	Series 218 MortarClad at 1/16 inch - 1/2 inch DFT
Finish Coat	Series 262 Elasto-Shield at 50.0 mils minimum DFT
Total DFT	54.0 mils minimum

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.

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

System Number	PM.06.07
Special Qualifications	MICROCLEAN™; 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

PM.07: WALLBOARD & DRYWALL

System Number	PM.07.01
Description	Moderate Conditions, Dry
Type	Water-Based 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. Theme-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.

PM.07: WALLBOARD & DRYWALL (CONTINUED)

System Number	PM.07.02
Special Qualifications	MICROCLEAN™
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	PM.07.03
Special Qualifications	MICROCLEAN™
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.tnemecc.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 Tnemecc Representative prior to final selection. Reference Tnemecc's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PM.08: INTERIOR CONCRETE FLOORING

System Number	PM.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	PM.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.

PM.08: INTERIOR CONCRETE FLOORING (CONTINUED)

System Number	PM.08.03
Special Qualifications	MICROCLEAN™
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 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	PM.08.04
Special Qualifications	MICROCLEAN™
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" 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.

PM.08: INTERIOR CONCRETE FLOORING (CONTINUED)

System Number	PM.08.05
Special Qualifications	MICROCLEAN™
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.

PM.09: MORTAR SYSTEMS

System Number	PM.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 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.

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.

PM.09: MORTAR SYSTEMS (CONTINUED)

System Number	PM.09.02
Special Qualifications	MICROCLEAN™
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.

PM.10: HIGH SERVICE MORTAR SYSTEMS

System Number	PM.10.01A
Special Qualifications	MICROCLEAN™
Description	Pouring, Casting, Vibration Dampening
Type	Polymer Concrete
Surface Preparation	Reference Series 469 LavaCrete Application Guide for surface preparation requirements. Consult with your Tneme Representative for specific product selection.
Series 469 LavaCrete®	Epoxy polymer concrete for casting trenches, sumps and vibration dampening.
Total DFT	0.375 inch - 8 inches in a single application

Carefully review product data sheets, along with related application guides, at www.tneme.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 Tneme Representative prior to final selection. Reference Tneme's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PM.10: HIGH SERVICE MORTAR SYSTEMS (CONTINUED)

System Number	PM.10.01B
Special Qualifications	MICROCLEAN™
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 inch - 8 inches in a single application

System Number	PM.10.01C
Special Qualifications	MICROCLEAN™
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 inches 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.

PM.10: HIGH SERVICE MORTAR SYSTEMS (CONTINUED)

System Number	PM.10.02
Special Qualifications	MICROCLEAN™
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 Series 211-9111 Bulking Powder to fill holes and cavities
Basecoat	Series 1415 Vinester with 20 - 25 lbs 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 per gallon
Topcoat	Series 1415 Vinester with Series 1400 Color Pack at 10.0 - 20.0 mils DFT or 65 - 135 ft ² per gallon
Total DFT	Nominal 90.0 mils

System Number	PM.10.03
Special Qualifications	MICROCLEAN™
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 (minimum 3/16 in, maximum 1/2 in) DFT
Finish Coat	Series 246 Ultra-Tread Glaze at 8.0 - 10.0 mils DFT
Total DFT	Nominal 1/4 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.

PM.11: INTERIOR CEILINGS

System Number	PM.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	PM.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

PM.12: EXTERIOR STEEL

System Number	PM.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.

PM.12: EXTERIOR STEEL (CONTINUED)

System Number	PM.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	PM.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, 1074 or 1075 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.

**For additional protection and extension of long-term weathering qualities, specify Series 1074U (gloss) or 1075U (semi-gloss).

System Number	PM.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

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.

PM.12: EXTERIOR STEEL (CONTINUED)

System Number	PM.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, 1074 or 1075** 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 1074U (gloss) or 1075U (semi-gloss).

System Number	PM.12.06
Special Qualifications	MICROCLEAN™
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

Carefully review product data sheets, along with related application guides, at www.tnemecc.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.

PM.12: EXTERIOR STEEL (CONTINUED)

System Number	PM.12.07
Special Qualifications	MICROCLEAN™
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

System Number	PM.12.08
Special Qualifications	MICROCLEAN™
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.

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.

PM.12: EXTERIOR STEEL (CONTINUED)

System Number	PM.12.09
Special Qualifications	MICROCLEAN™
Description	Marginally Prepared Surfaces
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	PM.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

System Number	PM.12.11
Description	Weathered Exterior Coatings*
Type	Water-Based 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.

PM.12: EXTERIOR STEEL (CONTINUED)

System Number	PM.12.12
Special Qualifications	MICROCLEAN™
Description	Aggressive Corrosion - Roll / Spray Over Abrasive Blasted Steel
Type	Epoxy Mastic / Epoxy Mastic / Polyurethane
Surface Preparation	SSPC-SP6 / NACE 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 1094 or 1095 Endura-Shield at 2.0 - 3.0 mils DFT
Total DFT	10.0 - 15.0 mils

PM.13: STEEL - ELEVATED SURFACE TEMPERATURES

System Number	PM.13.01
Description	Mild Atmospheric Exposure, Surface Temperatures up to 500°F (260°C)
Type	Silicone Alkyd / Acrylic Silicone Copolymer
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1501 Endura-Heat at 2.0 - 3.0 mils DFT
Finish Coat	Series 1552 Endura-Heat 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.

PM.13: STEEL - ELEVATED SURFACE TEMPERATURES (CONTINUED)

System Number	PM.13.02
Description	Mild Atmospheric Exposure, Surface Temperatures up to 1200°F (649°C)
Type	Silicone Copolymer or Inert Multipolymeric Matrix
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1525 Endura-Heat DTM at 3.0 - 5.0 mils DFT or Series 1528 Endura-Heat DTM at 4.0 - 8.0 mils DFT
Total DFT	3.0 - 5.0 mils or 4.0 - 8.0 mils

System Number	PM.13.03
Description	Moderate Atmospheric Exposure, Surface Temperatures up to 500°F (260°C)
Type	Inert Multipolymeric Matrix / Acrylic Silicone Copolymer
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1528 Endura-Heat DTM at 4.0 - 8.0 mils DFT
Finish Coat	Series 1552 Endura-Heat at 2.0 - 3.0 mils DFT
Total DFT	6.0 - 11.0 mils

System Number	PM.13.04
Description	Moderate Atmospheric Exposure, Surface Temperatures up to 1200°F (649°C)
Type	Inert Multipolymeric Matrix / Inert Multipolymeric Matrix
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1528 Endura-Heat DTM at 4.0 - 8.0 mils DFT
Finish Coat (Optional)	Series 1528 Endura-Heat DTM at 4.0 - 8.0 mils DFT
Total DFT	8.0 - 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.

PM.13: STEEL - ELEVATED SURFACE TEMPERATURES (CONTINUED)

System Number	PM.13.05
Special Qualifications	MICROCLEAN™
Description	Severe Atmospheric Exposure, Surface Temperatures up to 500°F (260°C)
Type	Silicone Zinc Copolymer / Acrylic Silicone Copolymer
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1505 Endura-Heat ZR at 2.0 - 3.0 mils DFT
Finish Coat	Series 1552 Endura-Heat at 2.0 - 3.0 mils DFT
Total DFT	4.0 - 6.0 mils

System Number	PM.13.06
Special Qualifications	MICROCLEAN™
Description	Severe Atmospheric Exposure, Surface Temperatures up to 1200°F (649°C)
Type	Inert Multipolymeric Matrix / Inert Multipolymeric Matrix
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1528 Endura-Heat DTM at 4.0 - 8.0 mils DFT
Finish Coat	Series 1528 Endura-Heat DTM at 4.0 - 8.0 mils DFT
Total DFT	8.0 - 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.

PM.14: EXTERIOR CONCRETE & MASONRY

System Number	PM.14.01
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	PM.14.02
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	PM.14.03
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 per gallon
Finish Coat	Series 626 Dur A Pell GS at 125 - 150 ft ² per gallon
Total DFT	62.5 - 75.0 ft ² per gallon

Carefully review product data sheets, along with related application guides, at www.tneme.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 Tneme Representative prior to final selection. Reference Tneme's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PM.14: EXTERIOR CONCRETE & MASONRY (CONTINUED)

System Number	PM.14.04
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.

PM.15: EXTERIOR STUCCO

System Number	PM.15.01
Description	Elastomeric Protection
Type	Water-Based 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.

PM.16: STEEL PROCESSING EQUIPMENT

System Number	PM.16.01
Special Qualifications	MICROCLEAN™
Description	CUI, Thermal Efficiency, Safe Touch and Condensation Control / Insulative
Type	Water-Based Epoxy / Insulative Coating
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1224 Epoxoline WB at 6.0 - 8.0 mils DFT
Intermediate	Series 975 Aerolon Epoxy, 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	PM.16.02
Description	Marginally Prepared, Surface Tolerant, Low-Temperature / Damp Surfaces
Type	Epoxy Mastic / Epoxy Mastic / Epoxy or Polyurethane
Surface Preparation	SSPC-SPWJ4 / 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.

PM.17: INTERIOR TANKS, VESSELS, FILTERS, ETC.

System Number	PM.17.01
Special Qualifications	ANSI/NSF Std. 61 Compliant Lining
Description	Potable, Fire and 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 FC20 Pota-Pox at 2.0 - 4.0 mils DFT
Stripe Coat	Series FC20 Pota-Pox at 2.0 - 4.0 mils DFT
Intermediate	Series FC20 Pota-Pox at 4.0 - 6.0 mils DFT
Finish Coat	Series FC20 Pota-Pox at 4.0 - 6.0 mils DFT
Total DFT	12.0 - 20.0 mils

System Number	PM.17.02
Special Qualifications	MICROCLEAN™; FDA 175.300 Compliant Lining
Description	Standard Service (Medium Film Build)
Type	Vinyl Ester: Primer / Flake-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1402 ProPolymer at 3.0 - 5.0 mils DFT
Finish Coat	Series 1430 ProPolymer at 15.0 - 20.0 mils DFT
Second Coat	Series 1430 ProPolymer at 15.0 - 20.0 mils DFT
Total DFT	33.0 - 45.0 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.

PM.17: INTERIOR TANKS, VESSELS, FILTERS, ETC.(CONTINUED)

System Number	PM.17.03
Special Qualifications	MICROCLEAN™; FDA 175.300 Compliant Lining
Description	Elevated Temperature and Cyclic Service (Medium Film Build)
Type	Vinyl Ester: Primer / Flake-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer (Optional)	Series 1402 ProPolymer at 3.0 - 5.0 mils DFT
Stripe Coat	Series 1402 ProPolymer at 3.0 - 5.0 mils DFT
Intermediate	Series 1432 ProPolymer at 15.0 - 20.0 mils DFT
Finish Coat	Series 1432 ProPolymer at 15.0 - 20.0 mils DFT
Total DFT	36.0 - 50.0 mils

System Number	PM.17.04
Special Qualifications	FDA 175.300 Compliant Lining
Description	Elevated Temperature and Cyclic Service (Heavy Film Build)
Type	Vinyl Ester: Primer / Glass Flake Trowel / Flake-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1402 ProPolymer at 3.0 - 5.0 mils DFT
First Trowel	Series 1420 ProPolymer at 40.0 - 65.0 mils DFT
Second Trowel	Series 1420 ProPolymer at 40.0 - 65.0 mils DFT
Finish Coat	Series 1430 ProPolymer at 15.0 - 20.0 mils DFT
Total DFT	98.0 - 155.0 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.

PM.17: INTERIOR TANKS, VESSELS, FILTERS, ETC.(CONTINUED)

System Number	PM.17.05
Special Qualifications	MICROCLEAN™; FDA 175.300 Compliant Lining
Description	Elevated Temperature and Cyclic Service (Heavy Film Build)
Type	Vinyl Ester: Primer / Glass Flake Trowel / Flake-Filled
Surface Preparation	SSPC-SP10 / NACE 2, minimum 3-mil anchor profile
Primer	Series 1402 ProPolymer at 3.0 - 5.0 mils DFT
First Trowel	Series 1422 ProPolymer at 40.0 - 65.0 mils DFT
Second Trowel	Series 1422 ProPolymer at 40.0 - 65.0 mils DFT
Finish Coat	Series 1432 ProPolymer at 15.0 - 20.0 mils DFT
Total DFT	98.0 - 155.0 mils

PM.18: LININGS

System Number	PM.18.01
Special Qualifications	MICROCLEAN™
Description	Storage of Aggressive Chemical Cargo
Type	Polyamine Epoxy
Surface Preparation	SSPC-SP5 / NACE 1
Stripe Coat	Series 61 Tneme-Liner at 4.0 - 6.0 mils DFT
Finish Coat	Series 391 Tank Armor at 20.0 - 40.0 mils DFT
Total DFT	24.0 - 46.0 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.

PM.18: LININGS (CONTINUED)

System Number	PM.18.02
Special Qualifications	MICROCLEAN™
Description	150-Mil Glass Roving Reinforced System
Type	Reinforced Vinyl Ester
Surface Preparation	Shot Blast or Mechanically Abrade - ICRI CSP 5 or greater
Primer	Series 1402 ProPolymer 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

PM.19: STEEL - SEVERE CORROSION HYDROGEN SULFIDE

System Number	PM.19.01
Special Qualifications	MICROCLEAN™
Description	Insulated Structures and Vessels, Surface Temperatures up to 1200°F (649°C)
Type	Inert Multipolymeric Matrix / Inert Multipolymeric Matrix
Surface Preparation	SSPC-SP6 / NACE 3
Primer	Series 1528 Endura-Heat DTM at 6.0 - 8.0 mils DFT
Finish Coat	Series 1528 Endura-Heat DTM at 6.0 - 8.0 mils DFT
Total DFT	12.0 - 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.

PM.19: STEEL - SEVERE CORROSION HYDROGEN SULFIDE (CONTINUED)

System Number	PM.19.02
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	PM.19.03
Special Qualifications	MICROCLEAN™
Description	Interior / Immersion Severe H ₂ S 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

PM.20: STEEL - STRUCTURAL, TANKS, PIPES & EQUIPMENT

System Number	PM.20.01
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

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.

PM.20: STEEL - STRUCTURAL, TANKS, PIPES & EQUIPMENT (CONTINUED)

System Number	PM.20.02
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

PM.21: CORROSION UNDER INSULATION

System Number	PM.21.01
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	PM.21.02
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

Carefully review product data sheets, along with related application guides, at www.tnemecc.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 Tnemecc Representative prior to final selection. Reference Tnemecc's certified product listing at www.nsf.org for details on the maximum allowable DFT.

PM.21: CORROSION UNDER INSULATION (CONTINUED)

System Number	PM.21.03
Special Qualifications	MICROCLEAN™
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

System Number	PM.21.04
Special Qualifications	MICROCLEAN™
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

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.

PM.22: SPECIALTY WALL SYSTEMS

System Number	PM.22.01
Special Qualifications	MICROCLEAN™
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)

System Number	PM.22.02
Special Qualifications	MICROCLEAN™
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

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.

PM.23: INSULATED PIPE

System Number	PM.23.01
Description	Interior / Exterior Exposed, Moderate to Mild Duty
Type	Acrylic / Acrylic
Surface Preparation	Clean and Dry
Primer	Series 1026, 1028 or 1029 Enduratone 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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