



SYSTEMS GUIDE

TO HIGH PERFORMANCE COATINGS FOR
WATER & WASTEWATER PROCESSING FACILITIES

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Published technical data, instructions, and pricing are subject to change without notice. Contact your Tnemec technical representative for current technical data, instructions, and pricing. Warranty information: The service life of Tnemec's coatings will vary. For warranty, limitation of seller's liability, and product information, please refer to Tnemec's Product Data Sheets at www.tnemec.com or contact your Tnemec Technical Representative. 02/2017

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INNOVATION IN EVERY COAT.™

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

STEEL - STRUCTURAL , TANKS, PIPE & EQUIPMENT

EXTERIOR EXPOSED

System Type:	Epoxy/Polyurethane or Zinc-Rich Urethane/Epoxy/Polyurethane
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]} or Series 90-97 Tneme-Zinc or Series 91-H ₂ O Hydro-Zinc, DFT 2.5 to 3.5 mils ^[1]
Intermediate Coat:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils ^{[1] [16]}
Finish Coat:	Series 1074 Endura-Shield, DFT 2.0 to 5.0 mils ^{[1] [4] [5] [12]}
Total DFT:	7.0 to 13.0 mils for Epoxy/Polyurethane or 6.5 to 11.5 mils for Zinc-Rich Urethane/Epoxy/Polyurethane

INTERIOR EXPOSED

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Total DFT:	6.0 to 10.0 mils

IMMERSION

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	SSPC-SP10/NACE 2
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Intermediate Coat (Optional):	Series 104 H.S. Epoxy, DFT 4.0 to 10.0 mils
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[1] [4] [16]} or Series 104 H.S. Epoxy, DFT 4.0 to 10.0 mils
Total DFT:	7.0 to 11.0 mils or 11.0 to 25.0 mils

System Type:	Epoxy/Coal Tar Epoxy
Surface Preparation:	SSPC-SP10/NACE 2
Primer (Optional):	Series N69 Hi-Build Epoxoline II ^[1] , DFT 3.0 to 5.0 mils ^{[4] [16]}
Finish Coat:	Series 46H-413 Hi-Build Tneme-Tar, DFT 14.0 - 20.0 mils
Total DFT:	17.0 to 25.0 mils

System Type:	Moisture-Cured Polyurethane/Polyamidoamine Epoxy/Modified Polyamine Epoxy
Surface Preparation:	SSPC-SP10/NACE 2 ^[10]
Primer:	Series 1 Omnithane, DFT 2.5 to 3.5 mils
Stripe Coat (Optional):	Series N69 Hi Build Epoxoline II, DFT 3.0 to 5.0 mils ^[4]
Finish Coat:	Series 142 Epoxoline, DFT 12.0 to 14.0 mils ^[4]
Total DFT:	17.5 to 22.5 mils

Additional coatings systems are available including those with low VOCs. Contact your Tnemec representative, refer to the product data sheets or visit www.tnemec.com for more information.

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tnemec system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tnemec "Chemical Resistance Guide" or consult Tnemec for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICR1 Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

STEEL - STRUCTURAL , TANKS, PIPE & EQUIPMENT (CONTINUED)

INTERIOR/IMMERSION SEVERE ^[2]

System Type:	Vinyl Ester/Vinyl Ester
Surface Preparation:	SSPC-SP5/NACE 1
Primer:	Series 120-5002 Vinester, DFT 12.0 to 18.0 mils
Finish Coat:	Series 120-5001 Vinester, DFT 12.0 to 18.0 mils
Total DFT:	24.0 to 36.0 mils

INTERIOR/IMMERSION SEVERE ^[2] H₂S VAPOR EXPOSURE

System Type:	Modified Polyamine Epoxy
Surface Preparation:	SSPC-SP5/NACE 1
Primer (Optional):	Series 435 Perma-Glaze, DFT 15.0 to 20.0 mils ^[17]
Finish Coat:	Series 435 Perma-Glaze, DFT 15.0 to 20.0 mils
Total DFT:	30.0 to 40.0 mils

BELOW GRADE

System Type:	Epoxy/Coal Tar Epoxy
Surface Preparation:	SSPC-SP10/NACE 2
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^[11] ^{[4] [16]}
Finish Coat:	Series 46H-413 Hi-Build Tneme-Tar, DFT 14.0 to 20.0 mils
Total DFT:	14.0 to 20.0 mils or 17.0 to 25.0 mils

MARGINALLY PREPARED SURFACES (MAINTENANCE), (NON-IMMERSION)

System Type:	Epoxy/Epoxy ^[3]
Surface Preparation:	Contact Tnemec for recommendation. ^[8]
Primer:	Series 135 Chembuild, DFT 4.0 to 6.0 mils ^[4]
Finish Coat:	Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^[11] ^{[4] [16]}
Total DFT:	8.0 to 12.0 mils

FACTORY PRIMED STEEL - DOORS, FRAMES

& MISCELLANEOUS EQUIPMENT

EXTERIOR EXPOSED

System Type:	Epoxy/Polyurethane ^[3]
Surface Preparation:	Clean and Dry
Primer:	Factory Primed ^[3]
Intermediate Coat:	Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils
Finish Coat:	Series 73, 1074 or 1075 Endura-Shield, DFT 2.0 to 3.0 mils ^[11] ^{[4] [5]}
Total DFT:	4.0 to 6.0 mils

INTERIOR EXPOSED

System Type:	Epoxy/Epoxy ^[3]
Surface Preparation:	Clean and Dry
Primer:	Factory Primed ^[3]
Intermediate Coat:	Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils
Finish Coat:	Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^[11] ^{[4] [16]}
Total DFT:	4.0 to 6.0 mils

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tnemec system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tnemec "Chemical Resistance Guide" or consult Tnemec for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

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WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

GALVANIZED STEEL & NON-FERROUS METAL PIPE

& MISCELLANEOUS FABRICATIONS

EXTERIOR EXPOSED

System Type:	Epoxy/Polyurethane
Surface Preparation:	Contact Tnemec for recommendation. ^[8]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 2.0 to 3.0 mils ^{[1] [4] [16]}
Finish Coat:	Series 73, 1074 or 1075 Endura-Shield, DFT 2.0 to 3.0 mils ^{[1] [4] [5]}
Total DFT:	4.0 to 6.0 mils

INTERIOR EXPOSED

System Type:	Epoxy/Epoxy
Surface Preparation:	Contact Tnemec for recommendation. ^[8]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 2.0 to 3.0 mils ^{[1] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 2.0 to 3.0 mils ^{[1] [16]}
Total DFT:	4.0 to 6.0 mils

IMMERSION

System Type:	Epoxy/Epoxy
Surface Preparation:	Contact Tnemec for recommendation. ^[8]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Total DFT:	7.0 to 11.0 mils

DUCTILE OR CAST IRON - PIPE, PUMPS & VALVES

EXTERIOR EXPOSED (OUTSIDE DIAMETER)

System Type:	Epoxy/Epoxy/Polyurethane
Surface Preparation:	Contact Tnemec for recommendation. ^[10]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Intermediate Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Finish Coat (Optional):	Series 73, 1074 or 1075 Endura-Shield, DFT 2.0 to 3.0 mils ^{[1] [4] [5]}
Total DFT:	7.0 to 11.0 mils or 9.0 to 14.0 mils

BELOW GROUND AND/OR IMMERSION (OUTSIDE DIAMETER)

System Type:	Epoxy/Coal Tar Epoxy
Surface Preparation:	Contact Tnemec for recommendation. ^[10]
Primer (Optional):	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Finish Coat:	Series 46H-413 Hi-Build Tneme-Tar, DFT 14.0 to 20.0 mils
Total DFT:	14.0 to 20.0 mils or 17.0 to 25.0 mils

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

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Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

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3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

DUCTILE OR CAST IRON - PIPE, PUMPS & VALVES (CONTINUED)

INTERIOR EXPOSED AND/OR IMMERSION (OUTSIDE DIAMETER)

System Type:	Epoxy/Epoxy
Surface Preparation:	Contact Tnemec for recommendation. ^[10]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^{[11] [4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[11] [4] [16]}
Total DFT:	7.0 to 11.0 mils

INTERIOR EXPOSED AND/OR IMMERSION, H₂S VAPOR EXPOSURE (INSIDE DIAMETER)

System Type:	Ceramic-Filled Epoxy
Surface Preparation:	Contact Tnemec for recommendation. ^[10]
Finish Coat:	Series 431 Perma-Shield PL, DFT 40.0 mils
Total DFT:	40.0 mils

PVC

EXTERIOR EXPOSED

System Type:	Epoxy/Polyurethane
Surface Preparation:	Scarify
Primer:	Series N69 Hi-Build Epoxoline II, DFT 2.0 to 3.0 mils ^{[11] [4] [16]}
Finish Coat:	Series 73, 1074 or 1075 Endura-Shield, DFT 2.0 to 3.0 mils ^{[11] [4] [15]}
Total DFT:	4.0 to 6.0 mils

INTERIOR EXPOSED

System Type:	Epoxy/Epoxy
Surface Preparation:	Scarify
Primer:	Series N69 Hi-Build Epoxoline II, DFT 2.0 to 3.0 mils ^{[11] [4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 2.0 to 3.0 mils ^{[11] [4] [16]}
Total DFT:	4.0 to 6.0 mils

INSULATED PIPE

INTERIOR/EXTERIOR EXPOSED

System Type:	Acrylic/Acrylic
Surface Preparation:	Clean and Dry
Primer:	Series 1026, Series 1028, or 1029 Enduratone or Series 30 Spra-Saf EN, DFT 2.0 to 3.0 mils
Finish Coat:	Series 1026, Series 1028, or 1029 Enduratone or Series 30 Spra-Saf EN, DFT 2.0 to 3.0 mils
Total DFT:	4.0 to 6.0 mils

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

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Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

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11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

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13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

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15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

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17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

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WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE

& DENSE CMU

EXTERIOR EXPOSED

System Type:	Waterborne Acrylate/ Waterborne Acrylate
Surface Preparation:	SSPC-SP13/NACE 6 Clean and Dry ^[15]
Primer:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils
Finish Coat:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils
Total DFT:	8.0 to 16.0 mils
System Type:	Acrylic/Acrylic
Surface Preparation:	SSPC-SP13/NACE 6 Clean and Dry ^[15]
Primer:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils
Finish Coat:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils
Total DFT:	8.0 to 16.0 mils
System Type:	Silane/Siloxane Blend
Surface Preparation:	SSPC-SP13/NACE 6, Clean and Dry ^[15]
Finish Coat:	Series 636 Dur A Pell 20 or Series 662 Prime A Pell Plus 40, DFT 75 to 150 sq ft/gal ^[6]
Total DFT:	100 to 200 sq ft/gal
System Type:	Acrylic Stain
Surface Preparation:	SSPC-SP13/NACE 6, Clean and Dry ^[15]
Finish Coat:	Series 607 or Series 617 Conformal Stain ^[13] , DFT 100 to 200 sq ft/gal ^[6]
Total DFT:	1.0 to 2.5 mils

EXTERIOR EXPOSED/GRAFFITI PROTECTION

System Type:	RTV Silicone
Surface Preparation:	SSPC-SP13/NACE 6, Clean and Dry
Primer:	Series 626 Dur A Pell GS, DFT 65 to 300 sq ft/gal ^[6]
Finish Coat:	Series 626 Dur A Pell GS, DFT 100 to 300 sq ft/gal ^[6]
Total DFT:	75 to 150 sq ft/gal

BELOW GRADE

System Type:	Coal Tar
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3 ^[15]
Finish Coat:	Series 46-465 H.B. Tnemecol, DFT 8.0 to 12.0 mils ^[4]
Total DFT:	8.0 to 12.0 mils

BELOW GRADE OR IMMERSION

System Type:	Coal Tar Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3 ^[15]
Finish Coat:	Series 46H-413 Hi-Build Tneme-Tar, DFT 14.0 to 20.0 mils
Total DFT:	14.0 to 20.0 mils

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WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE

& DENSE CMU (CONTINUED)

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3 ^[15]
Primer:	Series 61 Tneme-Liner, DFT 6.0 to 10.0 mils ^[4]
Finish Coat:	Series 61 Tneme-Liner, DFT 6.0 to 10.0 mils ^[4]
Total DFT:	12.0 to 20.0 mils

IMMERSION

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3 ^[15]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Total DFT:	8.0 to 12.0 mils

System Type:	Vinyl Ester/Vinyl Ester ^[2]
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP5 ^[15]
Primer:	Series 120-5002 Vinester ^[14] , DFT 12.0 to 18.0 mils
Finish Coat:	Series 120-5001 Vinester, DFT 12.0 to 18.0 mils
Total DFT:	24.0 to 36.0 mils

System Type:	Epoxy/Modified Polyurethane ^[2]
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3-5 ^[15]
Repair Mortar:	Series 217 MortarCrete, DFT 1/4 inch to 2.0 inches
Primer:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Primer (Optional Resurfacer):	Series 218 MortarClad, DFT 1/16 inch to 1/2 inch
Finish Coat:	Series 262 Elasto-Shield, DFT 50.0 mils minimum
Total DFT:	54.0 mils minimum

IMMERSION, H₂S VAPOR EXPOSURE

System Type:	Modified Polyamine Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 5 ^[15]
Repair Mortar:	Series 217 MortarCrete, DFT 1/4 inch to 2.0 inches
Primer (Optional Resurfacer):	Series 218 MortarClad, DFT 1/16 inch to 1/2 inch
Intermediate Coat:	Series 434 Perma-Shield H ₂ S, DFT 1/8 inch or 125.0 mils
Finish Coat (Optional):	Series 435 Perma-Glaze, DFT 15.0 - 20.0 mils
Total DFT:	Nominal 1/8 inch system

System Type:	Modified Polyamine Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 5 ^[15]
Repair Mortar:	Series 217 MortarCrete, DFT 1/4 inch to 2.0 inches
Primer (Optional Resurfacer):	Series 218 MortarClad, DFT 1/16 inch to 1/2 inch
Finish Coat:	Series 435 Perma-Glaze, DFT 30.0 - 40.0 mils ^[17]
Total DFT:	Nominal 1/8 inch system

Additional coatings systems are available including those with low VOCs. Contact your Tnemec representative, refer to the product data sheets or visit www.tnemec.com for more information.

See back page for brief description of all listed products. Reference the product data sheet for details.

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tnemec system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tnemec "Chemical Resistance Guide" or consult Tnemec for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE

& DENSE CMU (CONTINUED)

System Type:	Modified Polyamine Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 5 ^[15]
Repair Mortar:	Series 217 MortarCrete, DFT 1/4 inch to 2.0 inches
Primer (Optional Resurfacer):	Series 218 MortarClad, DFT 1/16 inch to 1/2 inch
Finish Coat:	Series 436 Perma-Shield FR, DFT 50.0 to 125.0 mils
Finish Coat (Optional):	Series 435 Perma-Glaze, DFT 15.0 to 20.0 mils
Total DFT:	Nominal 1/8 inch system

INTERIOR EXPOSED

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15]
Primer:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^[1] ^{[4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^[1] ^{[4] [16]}
Total DFT:	8.0 to 12.0 mils

System Type:	Acrylic-Epoxy/Acrylic-Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15]
Primer:	Series 113 or 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
Finish Coat:	Series 113 or 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
Total DFT:	8.0 to 12.0 mils

System Type:	Epoxy/Epoxy ^[2]
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15]
Primer:	Series 66HS Hi-Build Epoxoline, DFT 5.0 to 8.0 mils
Finish Coat:	Series 66HS Hi-Build Epoxoline, DFT 5.0 to 8.0 mils
Total DFT:	10.0 to 16.0 mils

ULTRAFILTRATION TANKS

System Type:	Mat-Reinforced Chemical-Resistant Lining
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15]
Primer:	Series N140F Pota-Pox Plus, DFT 3.0 - 6.0 mils
Bedding Coat:	Series 215 Surfacing Epoxy, DFT 60.0 - 80.0 mils
Reinforcement:	Series 211-215 Fiberglass Mat
Saturant Coat:	Series 22 Epoxoline, DFT 8.0 to 12.0 mils
Finish Coat:	Series 22 Epoxoline, DFT 20.0 to 30.0 mils
Total DFT:	91.0 to 128.0 mils

CONCRETE FLOORS

LIGHT TRAFFIC, LOW IMPACT

System Type:	Waterborne Epoxy/Waterborne Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 1-3 ^[15]
Primer:	Series 287 Enviro-Pox, DFT 3.0 - 4.0 mils
Finish:	Series 287 Enviro-Pox, DFT 3.0 - 4.0 mils
Total DFT:	6.0 to 8.0 mils

Additional coatings systems are available including those with low VOCs. Contact your Tnemec representative, refer to the product data sheets or visit www.tnemec.com for more information.

See back page for brief description of all listed products. Reference the product data sheet for details.

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tnemec system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tnemec "Chemical Resistance Guide" or consult Tnemec for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

CONCRETE FLOORS (CONTINUED)

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3-5 ^[15]
Primer:	Series 201 Epoxoprime, DFT 6.0 - 8.0 mils
Intermediate Coat:	Series 280 or 281 Tneme-Glaze, DFT 6.0 to 8.0 mils
Finish (Optional):	Series 280 or 281 Tneme-Glaze, DFT 6.0 to 8.0 mils ^[7]
Total DFT:	12.0 to 24.0 mils

MODERATE CHEMICAL ^[2] & ABUSE/FUNCTIONAL

System Type:	Epoxy/Aggregate Filled Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3-9 ^[15]
Primer:	Series 201 Epoxoprime, DFT 6.0 - 8.0 mils
Intermediate Coat:	Series 237 or 238 Power-Tread (Double Broadcast Application), DFT 1/8 inch
Finish Coat:	Series 280 or 281 Tneme-Glaze, DFT 6.0 to 8.0 mils ^[7]
Total DFT:	Nominal 1/8 inch system

System Type:	Epoxy/Ceramic Filled Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3-9 ^[15]
Primer (Optional):	Series 201 Epoxoprime, DFT 4.0 - 6.0 mils
Intermediate Coat:	Series 222 Deco-Tread (Double Broadcast Application), DFT 1/8 inch
Finish Coat:	Series 284 Tneme-Glaze ^[11] , DFT 8.0 to 10.0 mils ^[7]
Total DFT:	Nominal 1/8 inch system

CONCRETE SECONDARY CONTAINMENT

THIN FILM SYSTEM - FLOORS, SEVERE CHEMICAL, ABRASION & TRAFFIC ^[2]

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP 3-9 ^[15]
Primer:	Series 201 Epoxoprime, DFT 6.0 - 8.0 mils
Intermediate Coat:	Series 239SC ChemTread (Mortar & Fiberglass Installation), DFT 68.0 to 92.0 mils
Finish Coat:	Series 282 Tneme-Glaze, DFT 6.0 to 8.0 mils ^[7]
Total DFT:	Nominal 125.0 mils

CONCRETE & MASONRY - POROUS CMU & CONCRETE

EXTERIOR EXPOSED

System Type:	Acrylic or Epoxy/Acrylate
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill or 1254 EpoxoBlock, DFT 60-80 sq ft/gal ^[6]
Intermediate Coat:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils
Finish Coat:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils
Total DFT:	8.0 to 16.0 mils plus filler

Additional coatings systems are available including those with low VOCs. Contact your Tnemec representative, refer to the product data sheets or visit www.tnemec.com for more information.

See back page for brief description of all listed products. Reference the product data sheet for details.

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tnemec system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tnemec "Chemical Resistance Guide" or consult Tnemec for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

CONCRETE & MASONRY - POROUS CMU & CONCRETE (CONTINUED)

System Type:	Acrylic or Epoxy/Acrylic
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill or 1254 EpoxoBlock, DFT 60-80 sq ft/gal ^[6]
Intermediate Coat:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils
Finish Coat:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils
Total DFT:	8.0 to 16.0 mils plus filler

EXTERIOR EXPOSED/GRAFFITI PROTECTION

System Type:	RTV Silicone
Surface Preparation:	SSPC-SP13/NACE 6 Clean and Dry
Primer:	Series 626 Dur A Pell GS, DFT 65 to 300 sq ft/gal ^[6]
Finish Coat:	Series 626 Dur A Pell GS, DFT 100 to 300 sq ft/gal ^[6]
Total DFT:	75 to 150 sq ft/gal

INTERIOR EXPOSED

System Type:	Acrylic-Epoxy/Acrylic-Epoxy
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill or 1254 EpoxoBlock, DFT 60-80 sq ft/gal ^[6]
Intermediate Coat:	Series 113 or 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
Finish Coat:	Series 113 or 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
Total DFT:	8.0 to 12.0 mils plus filler
System Type:	Acrylic or Epoxy/Epoxy
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill or 1254 EpoxoBlock, DFT 60 to 80 sq ft/gal
Intermediate:	Series N69 Hi-Build Epoxoline II ^[1] , DFT 4.0 to 6.0 mils ^{[4][16]}
Finish Coat:	Series N69 Hi-Build Epoxoline II ^[1] , DFT 4.0 to 6.0 mils ^{[4][16]}
Total DFT:	8.0 to 12.0 mils plus filler

System Type:	Acrylic or Epoxy/Epoxy
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP 2-4 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill or 1254 EpoxoBlock, DFT 60 to 80 sq ft/gal ^[6]
Intermediate Coat:	Series 66HS Hi-Build Epoxoline, DFT 5.0 to 8.0 mils
Finish Coat:	Series 66HS Hi-Build Epoxoline, DFT 5.0 to 8.0 mils
Total DFT:	10.0 to 16.0 mils plus filler

HEAVY ABUSE

System Type:	100% Solids Fiber-Reinforced Epoxy
Surface Preparation:	Concrete Masonry Units: SSPC-SP13/NACE 6 Concrete: SSPC-SP13/NACE 6. ICRI CSP 3-4
Primer:	Series 201 Epoxoprime ^[16] , DFT 6.0 to 8.0 mils
Intermediate Coat:	Series 273 Stranlok ML, DFT 20.0 to 25.0 mils with reinforcing mat
Finish Coat:	Series 280 Tneme-Glaze ^[6] , DFT 6.0 to 8.0 mils
Total DFT:	32.0 to 41.0 mils

Additional coatings systems are available including those with low VOCs. Contact your Tnemec representative, refer to the product data sheets or visit www.tnemec.com for more information.

See back page for brief description of all listed products. Reference the product data sheet for details.

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply:
For Series N69, use Series N140 Pota-Pox Plus
For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tnemec system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tnemec "Chemical Resistance Guide" or consult Tnemec for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tnemec for an overcoat risk assessment and specific recommendations. Request Tnemec Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

8 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.

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

INTERIOR GYPSUM WALLBOARD

INTERIOR EXPOSED

System Type:	Waterborne Epoxy/Waterborne Acrylic Epoxy
Surface Preparation:	Clean and Dry
Primer:	Series 151-1051 Elasto-Grip FC, DFT 1.0 - 2.0 mils
Finish Coat:	Series 113 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ¹⁴
Total DFT:	5.0 to 8.0 mils plus filler

HEAVY ABUSE

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	Refer to Product Data Sheet
Primer:	Series 201 Epoxoprime, DFT 6.0 to 8.0 mils
Intermediate Coat:	Series 270 Stranlok, DFT 25.0 to 40.0 or 273 Stranlok ML, DFT 20.0 to 25.0 mils with reinforcing mat
Finish Coat:	Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils
Total DFT:	37.0 to 56.0 mils or 32.0 to 41.0 mils with reinforcing mat

WOOD

INTERIOR OR EXTERIOR EXPOSED

System Type:	Alkyd or Waterborne Acrylic Epoxy/Acrylic
Surface Preparation:	Clean and Dry
Primer:	Series 10-99W Tneme Primer, DFT 2.0 to 3.5 mils or Series 151-1051 Elasto-Grip FC, DFT 1.0 to 2.0 mils
Finish Coat:	Series 1026, 1028 or 1029 Enduratone, DFT 2.0 to 3.0 mils ¹⁴
Total DFT:	4.0 to 6.5 mils or 3.0 to 5.0 mils

Additional coatings systems are available including those with low VOCs. Contact your Tneme representative, refer to the product data sheets or visit www.tneme.com for more information.

See back page for brief description of all listed products. Reference the product data sheet for details.

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF Std. 61. The following substitutions apply: For Series N69, use Series N140 Pota-Pox Plus For Series 262, use Series 264 Elasto-Shield

1 Faster cure/low temperature cure alternative is available. Consult the product data sheet for information.

Series N69 Add 44-700 Accelerator
Series 73, 1074, 1075 Add 44-710 Accelerator
Series 90-97 Add 44-710 Accelerator

2 The appropriate Tneme system may vary depending on type of chemical, concentration and exposure temperatures. Refer to Tneme "Chemical Resistance Guide" or consult Tneme for specific recommendations.

3 System recommendation will vary depending on the generic type and condition of the existing system. Overcoat of factory applied and aged coatings requires testing before application. Consult Tneme for an overcoat risk assessment and specific recommendations. Request Tneme Technical Bulletin 98-10.

4 Brush or roller application may require additional coat(s) to achieve recommended film thickness and/or complete hiding.

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

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

7 Number of coats and film thickness may vary depending on gloss and skid-resistance properties preferred.

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

9 Coverage rates will vary depending on density of the substrate.

10 Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tneme representative or Tneme Technical Services. Reference Technical Bulletin 98-15.

11 Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 295 Clear CRU as a finish coat for added chemical resistance and gloss finish.

12 For a premiere fluoropolymer finish, use Series 700, V700, 701 or V701 HydroFlon.

13 For superior water repellency in addition to color, use Series 636 or 662 prior to applying Series 607 or 617.

14 Use Series 215 for filling voids/surfacing prior to application of the Vinester prime coat.

15 Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

16 Series L69 or V69 may be substituted when a lower VOC or HAPS level is desired.

17 Series 435 may be applied at a high-build option of 40-80 mils DFT in one or two coats.

Film thickness for coatings applied to concrete and CMU is calculated from the sq. ft./gal. figures. There is no method for accurately measuring the film thickness of coatings applied over a rough masonry substrate.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

SERIES 1 OMNITHANE®

Modified Aromatic Polyurethane Primer
Single component, moisture-cured resin, containing a proprietary blend of micaceous iron oxide and zinc to function as a primer which is field and shop friendly. May be used in OEM manufacturing, potable water and wastewater immersion with the proper topcoats.

SERIES 10 TNEMEC® PRIMERS

Modified Alkyd Coating
Chemically active, rust-inhibitive primer for ferrous metals. Provides extended weathering and abrasion resistance for shop and field priming of structural and miscellaneous steel.

SERIES 27 F.C. TYPOXY®

Epoxy Polyamide Coating
A versatile low-temperature coating ideally suited for fabrication and OEM application. Also widely used as a field tie-coat. Provides fast curing and rapid handling capabilities.

SERIES 30 SPRA-SAF EN®

Hydrophobic Acrylic Polymer
A direct-to-metal coating with early flash-rust resistance, long term corrosion, and weathering properties. Mildew resistant. Provides good gloss and color retention.

SERIES 44 ACCELERATORS

Epoxy Accelerator and Urethane Accelerator
Series 44-700 Epoxy Accelerator and 44-710 Urethane Accelerator are special additives used to quicken the cure rate of several Tnemec coatings plus allow application in cooler temperatures.

SERIES 46H-413 HI-BUILD TNEME-TAR™

Polyamide Coal Tar Epoxy Coating
Corrosion- and chemical-resistant coating for use on steel or concrete in immersion and underground conditions. High-build properties allow for application up to 20 mils DFT.

SERIES 46-465 H.B. TNEMECOL™

Coal Tar Coating
Versatile coating for use on steel or concrete in immersion, splash, spillage chemical fumes and below-grade applications.

SERIES 61 TNEME-LINER™

Cycloaliphatic Amine Epoxy
Tightly cross-linked epoxy with excellent corrosion and chemical resistance. Principally used for immersion service, including fuel and crude oil storage, chemical containment and wastewater treatment.

SERIES N69 HI-BUILD EPOXOLINE® II

Polyamidoamine Epoxy Coating
High-solids epoxy with performance characteristics similar to Series 66 Hi-Build Epoxoline. Series N69 can be combined with 44-700 Epoxy Accelerator for rapid cure and cold temperature applications.

SERIES 73, 1074 & 1075 ENDURA-SHIELD®

High-Build Acrylic Polyurethane Coatings
Long-lasting, durable finishes available in a virtually unlimited color range. High-build characteristics allow for single-coat coverage at 5.0 dry mils when spray-applied.

SERIES 66HS HI-BUILD EPOXOLINE®

Polyamide Epoxy Primer
High-solids, low VOC, pure polyamide epoxy offering exceptional protection to a variety of substrates. Applied as a primer, intermediate or topcoat, this versatile coating also accepts a wide range of finish coats, allowing for a coating system tailored to specific exposure conditions.

SERIES 90-97 TNEME-ZINC™

Zinc-Rich Urethane Primer
Organic zinc-rich primer affords galvanic and barrier protection. Can be mixed with 44-710 Urethane Accelerator for low temperature and rapid cure requirements.

SERIES 91-H₂O HYDRO-ZINC®

Moisture-Cured Zinc-Rich Primer
Two-component, steel primer for interior and exterior surfaces of potable water storage tanks and reservoirs. Certified in accordance with ANSI/NSF Std. 61 for potable water contact. May be topcoated same day with other Tnemec potable water coatings, when cured at temperatures down to 35°F (2°C).

SERIES 104 H.S. EPOXY

Cycloaliphatic Amine Epoxy
Versatile coating applies up to 10 mils per coat on steel or concrete. Protects in immersion, salt spray and chemical exposures. Superior abrasion- and stain-resistance.

SERIES 113 & 114 H.B. TNEME-TUFCOAT™

Waterborne Acrylic Epoxy Coatings
Water-based coatings that have similar performance properties as solvent-based epoxies. Often used on concrete and CMU walls. Available in fade-resistant colors, non-yellowing whites and satin and gloss finishes.

SERIES 120 VINESTER®

Vinyl Ester Coating
Provides superior protection against organic and inorganic acids and splash, spillage and fumes. Frequently used for secondary containment, immersion service and as a topcoat for additional chemical resistance with various epoxy flooring and wall systems.

SERIES 130 ENVIROFILL®

Waterborne Cementitious Acrylic filler
Excellent for filling interior/exterior porous concrete and CMU. Accommodates a variety of high-performance topcoats.

SERIES 135 CHEMBUILD®

Modified Polyamidoamine Epoxy
Flexible, high-build coating for application to marginally cleaned rusty steel and tightly adhering aged coatings. Provides excellent abrasion, chemical and corrosion resistance.

SERIES N140 POTA-POX® PLUS

High Solids Epoxy Coating
Optional high-build properties providing added barrier protection particularly on edges, weld seams and pits. When used with 44-700 Epoxy Accelerator, Series N140 can be applied to substrates with temperatures as low as 35°F. Both Series N140 and 44-700 are VOC-compliant.

SERIES 151-1051 ELASTO-GRIP® FC

Waterborne Epoxy Primer
Penetrating, flexible and low odor primer for sealing cementitious and other porous substrates. Also excellent as a tie-coat over sound existing coatings.

SERIES 156 & 157 ENVIRO-CRETE®

Waterborne Acrylate Elastomeric Coatings
Water-based coatings provide excellent protection against driving rain, UV light and alternate freeze-thaw cycles. Inherent flexibility allows these coatings to expand and contract with minor substrate movement. Self-priming and available in smooth, textured and extra textured finishes in a variety of colors.

SERIES 180 & 181 W.B. TNEME-CRETE®

Acrylic Emulsion Coatings
High-build, water-based coatings providing long-term protection against weather, driving rain and alternate freeze-thaw. Available in smooth or textured finishes and a variety of colors.

SERIES 201 EPOXOPRIME®

Polyamine Epoxy Primer
Multi-purpose, high-solids epoxy coating primarily used as a primer for 100% solids epoxy systems such as Stranlok and Power-Tread. Can also be used as a clear floor sealer.

SERIES 218 MORTARCLAD™

Epoxy Modified Mortar
A high-performance, aggregate reinforced material for surfacing, patching and filling voids and bugholes in concrete substrates from 1/32" to 1/4".

SERIES 222 DECO-TREAD®

Ceramic-Filled Polyamine Epoxy Floor Topping
Decorative laminate flooring system installed at 1/8" minimum by double broadcast or slurry/broadcast application. Protects against abrasion, impact and mild chemicals with an aesthetically pleasing, easy-to-clean surface.

WATER & WASTEWATER TREATMENT FACILITIES: SELECTION GUIDE FOR COATINGS

SERIES 237 & 238 POWER-TREAD®

Aggregate-Filled Polyamine Epoxy Floor Topping

A functional laminate flooring system installed at 1/8" minimum by double broadcast or slurry/broadcast application. Topcoated with Tneme-Glaze, it protects against impact, abrasion and mild chemicals with an easy-to-clean, non-absorbent and skid-resistant finish.

SERIES 239SC CHEMBLOC®

Modified Novolac Polyamine Epoxy

A highly chemical resistant, multi-purpose resin for fiberglass reinforced mat (65 mils) or mortar/fiberglass reinforced mat (125 mils) secondary containment systems.

SERIES 262 & 264 ELASTO-SHIELD®

Modified Polyurethane Coatings

Thick film elastomeric membrane for lining potable water basins, reservoirs and pipe. Can be spray-applied at 50 to 100 mils DFT.

SERIES 270 STRANLOK AND SERIES 273 STRANLOK ML®

Polyamine Epoxy

Fiberglass-reinforced coating that protects against acids, alkalis, impact and abrasion. Provides a seamless surface which holds up under rigorous hot water washdowns. Excellent for process area walls. Series 273 utilizes a fiberglass mat.

SERIES 280, 281 & 282 TNEME-GLAZE™

Polyamine Epoxy Coatings

Glaze-like finishes/sealers used over Series 201 Epoxoprime and as part of the MicroClean system. Provide protection against abrasion, chemicals and frequent cleaning. Series 280 and 282 can be used on vertical and horizontal surfaces. Series 282, Novolac, provides extra chemical resistance. Series 281 provides a high-gloss "showroom" finish for floors.

SERIES 284 DECO-CLEAR® & 285 SATIN-GLAZE®

Polyamine Epoxy Coatings

Clear finish for use over the Series 222 Deco-Tread flooring system. Protects against mild chemicals, impact and abrasion. Depending on the number of coats, will provide a smooth or skid-resistant finish. Series 285 has an orange peel texture.

SERIES 287 ENVIRO-POX®

Waterborne Epoxy-Amine Adduct

Low odor, rapid cure, wear-resistant floor coating capable of withstanding frequent spillage of water, oil and grease, and mild to moderate chemical and solvent exposures, as well as repeated cleaning.

SERIES 431 PERMA-SHIELD® PL

Modified Polyamine Ceramic Epoxy

A 100% solids, abrasion-resistant lining specifically designed for wastewater immersion and fume environments. Provides low permeation to H₂S gas, protects against MIC and provides chemical resistance to steel, ductile iron pipe and fittings for severe wastewater.

SERIES 434 PERMA-SHIELD H₂S®

Modified Aliphatic Amine Epoxy Mortar

An aggregate reinforced, 100% solids, hybrid epoxy mortar designed for wastewater immersion/fume environments where hydrogen sulfide gas and sulfuric acid are present.

SERIES 435 PERMA-GLAZE®

Modified Polyamine Epoxy

A versatile, thick film, 100% solids, abrasion-resistant lining specifically designed for wastewater immersion and fume environments. Provides low permeation to H₂S gas, protects against MIC and provides chemical resistance to severe wastewater environments.

SERIES 436 PERMA-SHIELD® FR

Fiber-Reinforced Modified Polyamine Epoxy

A thick film, 100% solids, abrasion-resistant lining specifically designed for wastewater immersion environments. Fiber-reinforcement provides superior physical strength and higher film build. Provides excellent resistance to H₂S gas permeation, protects against MIC and provides chemical resistance to severe wastewater environments.

SERIES 446 PERMA-SHIELD® MCU

Hydrophobic Aromatic Moisture-Cured Polyurethane

An advanced technology, moisture-cured finish coat providing excellent protection to steel and concrete substrates in wastewater environments. It is user-friendly and rapid curing.

SERIES 607 CONFORMAL™ STAIN

Methylmethacrylate Acrylic

Penetrating, solvent based masonry stain for horizontal concrete and virtually all vertical, above-grade masonry substrates. Exhibits excellent color stability and is designed not to peel or flake when applied to a properly prepared substrate. Specify Series 617 for water-based masonry stain.

SERIES 617 CONFORMAL™ STAIN WB

100% Acrylic Polymer

Penetrating, water-based masonry stain providing color uniformity by correcting color imperfections. Repels water when used on dense substrates. Resists mildew and contains agents that inhibit the growth of mildew on the surface of the stain.

SERIES 626 DUR A PELL GS™

RTV Silicone Rubber

Provides a clear, non-sacrificial, penetrating barrier against graffiti, as well as water repellency to provide superior protection against, and easy removal of, unwanted graffiti. This product is intended for use in conjunction with Series 680 Mark A Way to provide a complete Graffiti Protection System.

SERIES 636 DUR A PELL 20™

Silane/Siloxane Blend

A water-based, clear, filmless, penetrating water repellent for virtually all above-grade, vertical and horizontal masonry substrates. The solution penetrates the substrate and chemically reacts to create a powerful barrier against water penetration. This barrier is resistant to ultraviolet and weather deterioration.

SERIES 662 PRIME-A-PELL® PLUS

Modified Siloxane/Silane With Diffused Quartz Carbide

Provides a clear, non-sacrificial, penetrating barrier against graffiti, as well as water repellency on all uncoated masonry substrates. Formulated to provide superior protection against, and easy removal of, unwanted graffiti. This product is intended for use in conjunction with Series 680 Mark A Way to provide a complete Graffiti Protection System.

SERIES 1026 ENDURATONE®

Industrial grade, matte finish, water-based coating with excellent color retention. Good overall protection for most interior/exterior surfaces in mild to moderately severe exposures.

SERIES 1028 & 1029 ENDURATONE®

HDP Acrylic Polymer

Water-based, low VOC, high dispersion pure acrylic polymer coatings providing excellent long term protection in both interior and exterior exposures. May be applied by spray, brush or roller over a variety of solvent and waterborne steel primers. Mildew resistant and exhibits very good gloss and color stability.

SERIES 1254 EPOXOBLOCK WB®

Inorganic Hybrid Water-Based Epoxy

An advanced generation, low VOC epoxy coating for filling surface voids in porous concrete and masonry block in interior and exterior environments. Provides high bond strength, fast curing, and rapid overcoating capabilities.

TNEMEC COLOR SYSTEM MATERIAL IDENTIFICATION

The following colors have been used successfully in water and wastewater treatment plants for identification of various material contained in tanks and pipe. These colors are in general accordance with the Recommended Standards for Water Works, published by the Great Lakes - Upper Mississippi River Board of State Public Health and Environmental Managers.

WATER	GENERIC COLOR	COLOR IDENTIFICATION
Raw Water	olive green	110GN Clover
Settled or Clarified Water	aqua	10GN Aqua Sky
Finished or Potable Water	dark blue	11SF Safety Blue
WASTEWATER	GENERIC COLOR	COLOR IDENTIFICATION
Sewage Plant Effluent	clay*	07RD Terra Cotta
Backwash Waste	light brown	68BR Twine
Sludge	dark brown	84BR Weathered Bark
Sewer (Sanitary or Other)	dark gray	34GR Deep Space
CHEMICAL	GENERIC COLOR	COLOR IDENTIFICATION
Alum or Primary Coagulant	orange	04SF Safety Orange
Ammonia	white	00WH Tnemec White
Carbon Slurry	black	35GR Black
Caustic	yellow with green band	02SF Safety Yellow with 09SF Safety Green band
Chlorine (Gas and Solution)	yellow	02SF Safety Yellow
Fluoride	light blue with red band	25BL Fountainbleu with 06SF Safety Red band
Lime Slurry	light green	37GN Irish Spring
Ozone	yellow with orange band	02SF Safety Yellow with 04SF Safety Orange band
Phosphate Compounds	light green with red band	37GN Irish Spring with 06SF Safety Red band
Polymers or Coagulant Aids	orange with green band	04SF Safety Orange with 09SF Safety Green band
Potassium Permanganate	violet	14SF Safety Purple
Soda Ash	light green with orange band	37GN Irish Spring with 04SF Safety Orange band
Sulfuric Acid	yellow with red band	02SF Safety Yellow with 06SF Safety Red band
Sulfur Dioxide	light green with yellow band	37GN Irish Spring with 02SF Safety Yellow band
OTHER	GENERIC COLOR	COLOR IDENTIFICATION
Compressed Air	dark green	91GN Balsam
Gas	red	28RD Monterrey Tile
Other Lines	light gray	32GR Light Gray
Hoists/Trolleys	yellow*	02SF Safety Yellow
Fire Protection	red*	06SF Safety Red

*These generic colors are not part of the Recommended Standards for Water Works.