

S Y S T E M S G U I D E
TO HIGH PERFORMANCE COATINGS FOR
WATER & WASTEWATER
PROCESSING FACILITIES



Everything Else

Is Just Paint.™

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Exposure/Substrate

STEEL - STRUCTURAL, TANKS, PIPE & EQUIPMENT

Exterior Exposed

System Type:	Epoxy/Polyurethane or Zinc/Epoxy/Polyurethane
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series N69 Hi-Build Epoxoline, 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:	Series N69 Hi-Build Epoxoline or Series 27 Typoxy, DFT 2.0 to 3.0 mils ^[1] ^[16]
Finish:	Series 73, 1074 or 1075 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/Epoxy/Polyurethane

Interior Exposed

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series N69 Hi-Build Epoxoline, DFT 3.0 to 5.0 mils ^[1] ^[4] ^[16]
Finish:	Series N69 Hi-Build Epoxoline, 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, DFT 3.0 to 5.0 mils ^[1] ^[4] ^[16]
Intermediate (Optional):	Series 104 H.S. Epoxy, DFT 4.0 to 10.0 mils
Finish:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^[1] ^[4] ^[16] Series 104 H.S. Epoxy, DFT 4.0 to 10.0 mils
Total DFT:	7.0 to 1.0 mils or 11.0 to 25.0 mils

Immersion

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

Immersion and/or H₂S Exposure

System Type:	Moisture-Cured Polyurethane/ Moisture-Cured Polyurethane/ Moisture-Cured Polyurethane
Surface Preparation:	SSPC-SP10/NACE 2 ^[10]
Primer:	Series 1 Omnithane, DFT 2.5 to 3.5 mils
Intermediate:	Series 446 Perma-Shield MCU, DFT 5.0 to 10.0 mils ^[4]
Finish:	Series 446 Perma-Shield MCU, DFT 5.0 to 10.0 mils ^[4]
Total DFT:	12.5 to 23.5 mils

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:	Series 120-5001 Vinester, DFT 12.0 to 18.0 mils
Total DFT:	24.0 to 36.0 mils

NOTES:

Most products listed contain organic solvents. Tnemec manufactures products that comply with lower VOC restrictions. Please contact your Tnemec representative listed at www.Tnemec.com for specific product recommendations for compliance to local VOC regulations.

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

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

Exposure/Substrate

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

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: 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 (optional): Series N69 Hi-Build Epoxoline, DFT 3.0 to 5.0 mils ^[1] ^[4] ^[16]
 Finish: Series 46H-413 Hi-Build Tnemec-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) ³ (non-immersion)

System Type: Epoxy/Epoxy
 Surface Preparation: Contact Tnemec Representative
 Primer: Series 135 Chembuild, DFT 4.0 to 6.0 mils ^[4]
 Finish: Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^[1] ^[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: Series 27 Typoxy, DFT 2.0 to 3.0 mils
 Finish: 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 ^[3]
 Surface Preparation: Clean and Dry
 Primer: Factory Primed ^[3]
 Intermediate: Series 27 Typoxy, DFT 2.0 to 3.0 mils
 Finish Coat: Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^[1] ^[4] ^[16]
 Total DFT: 4.0 to 6.0 mils

GALVANIZED STEEL & NON-FERROUS METAL- PIPE & MISCELLANEOUS FABRICATIONS

Exterior Exposed

System Type: Epoxy/Polyurethane
 Surface Preparation: See Note 8
 Primer: Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^[1] ^[4] ^[16]
 Finish: 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

NOTES:

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

Exposure/Substrate

GALVANIZED STEEL & NON-FERROUS METAL- PIPE & MISC. FABRICATIONS (continued)

Interior Exposed

System Type:	Epoxy/Epoxy
Surface Preparation:	See Note 8
Primer:	Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^{[1] [4] [16]}
Finish:	Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^{[1] [4] [16]}
Total DFT:	4.0 to 6.0 mils

Immersion

System Type:	Epoxy/Epoxy
Surface Preparation:	See Note 8
Primer:	Series N69 Hi-Build Epoxoline, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Finish:	Series N69 Hi-Build Epoxoline, 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

System Type:	Epoxy/Epoxy/Polyurethane (Polyurethane Optional)
Surface Preparation:	Contact Tnemec Representative ^[10]
Primer:	Series N69 Hi-Build Epoxoline, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Intermediate:	Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Finish:	(Optional) Series 73, Series 1074 or Series 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

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

Interior Exposed and/or Immersion

System Type:	Epoxy/Epoxy
Surface Preparation:	Contact Tnemec Representative ^[10]
Primer:	Series N69 Hi-Build Epoxoline, DFT 3.0 to 5.0 mils ^{[1] [4] [16]}
Finish Coat:	Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
Total DFT:	7.0 to 11.0 mils

Interior Exposed and/or Immersion

System Type:	Moisture-Cured Polyurethane/ Moisture-Cured Polyurethane/ Moisture-Cured Polyurethane
Surface Preparation:	Contact Tnemec Representative ^[10]
Primer:	Series 1 Omnithane, DFT 2.5 to 3.5 mils
Intermediate:	Series 446 Perma-Shield MCU, DFT 5.0 to 10.0 mils ^[4]
Finish:	Series 446 Perma-Shield MCU, DFT 5.0 to 10.0 mils ^[4]
Total DFT:	12.5 to 23.5 mils

PVC

Exterior Exposed

System Type:	Epoxy/Polyurethane
Surface Preparation:	Scarify
Primer:	Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^{[1] [4] [16]}
Finish:	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

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

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Exposure/Substrate

PVC (continued)

Interior Exposed

System Type:	Epoxy/Epoxy
Surface Preparation:	Scarify
Primer:	Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^[1] ^[4] ^[16]
Finish:	Series N69 Hi-Build Epoxoline, DFT 2.0 to 3.0 mils ^[1] ^[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 6 Tneme-Cryl or Series 1028 or 1029 Enduratone or Series 30 Spra-Saf EN
Finish:	Series 6 Tneme-Cryl or Series 1028 or 1029 Enduratone or Series 30 Spra-Saf EN
Total DFT:	4.0 to 6.0 mils

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 or Series 157 Enviro-Crete, 6.0 to 9.0
Finish Coat:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils or Series 157 Enviro-Crete, 6.0 to 9.0
Total DFT:	8.0 to 16.0 mils or 12.0 to 18.0 mils

Exterior Exposed

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:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils
Total DFT:	8.0 to 16.0 mils

Exterior Exposed/Graffiti Protection

System Type:	RTV Silicone
Surface Preparation:	SSPC-SP 13/NACE 6 Clean and Dry
Primer:	Series 626 Dur A Pell GS, DFT 65 to 300 sq ft/gal ^[6]
Finish:	Series 626 Dur A Pell GS, DFT 100 to 300 sq ft/gal ^[6]
Total DFT:	75 to 150 sq ft/gal

Exterior Exposed

System Type:	Silane/Siloxane Blend
Surface Preparation:	SSPC-SP13/NACE 6 Clean and Dry ^[15]
Finish:	Series 636 Dur A Pell 20 or Series 662 Prime A Pell Plus 40, DFT 100 to 200 sq ft/gal ^[6]
Total DFT:	100 to 200 sq ft/gal

Exterior Exposed

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:	0.5 to 2.5 mils

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POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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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Exposure/Substrate

CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE & DENSE CMU (continued)

Below Grade

System Type: Coal Tar
Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP3 ^[15]

Finish: Series 46-465 H.B. Tnemecol, DFT 8.0 to 12.0 mils ^[4]
Total DFT: 8.0 to 12.0 mils

Below Grade

System Type: Coal Tar Epoxy
Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP3 ^[15]

Finish: Series 46H-413 Hi-Build Tnemec-Tar, DFT 14.0 to 20.0 mils
Total DFT: 14.0 to 20.0 mils

Immersion

System Type: Epoxy/Epoxy
Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP3 ^[15]

Primer: Series 104 H.S. Epoxy, DFT 6.0 to 10.0 mils ^[4]
Finish: Series 104 H.S. Epoxy, 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 CSP3 ^[15]

Primer: Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^[1] ^[4] ^[16]
Finish Coat: Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^[1] ^[4] ^[16]
Total DFT: 8.0 to 12.0 mils

Immersion

System Type: Coal Tar Epoxy ^[2]
Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP3 ^[15]

Finish: Series 46H-413 Hi-Build Tnemec-Tar, DFT 14.0 to 20.0 mils
Total DFT: 14.0 to 20.0 mils

Immersion

System Type: Epoxy/Modified Polyurethane ^[2]
Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP3-5 ^[15]

Primer: Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^[1] ^[4] ^[16]
Finish: Series 262 Elasto-Shield, DFT 50.0 mils minimum
Total DFT: 54.0 mils minimum

Immersion

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: Series 120-5001 Vinester, DFT 12.0 to 18.0 mils
Total DFT: 24.0 to 36.0 mils

NOTES:

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Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

Exposure/Substrate

CONCRETE & MASONRY - PRECAST, POURED-IN-PLACE & DENSE CMU (continued)

Immersion, H₂S Vapor Exposure

System Type: Modified Polyamine Epoxy
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP5 ^[15]
 Primer: Series 218 MortarClad, DFT 1/32 inch to 1/4 inch
 Intermediate: Series 434 Perma-Shield H₂S, DFT 1/8 inch or 125.0 mils
 Finish (Optional): Series 435 Perma-Glaze, DFT 30.0 - 40.0 mils
 Total DFT: Nominal 1/8 inch system

Immersion, H₂S Vapor Exposure

System Type: Modified Polyamine Epoxy
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP5 ^[15]
 Primer: Series 218 MortarClad, DFT 1/32 inch to 1/4 inch
 Finish: Series 435 Perma-Glaze, DFT 30.0 - 40.0 mils ^[17]
 Total DFT: Nominal 1/8 inch system

Immersion, H₂S Vapor Exposure

System Type: Modified Polyamine Epoxy
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP5 ^[15]
 Primer: Series 218 MortarClad, DFT 1/32 inch to 1/4 inch
 Finish: Series 436 Perma-Shield FR, DFT 50.0 to 125.0 mils
 Total DFT: Nominal 1/8 inch system

Interior Exposed

System Type: Epoxy/Epoxy
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP1-3 ^[15]
 Primer: Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
 Finish: Series N69 Hi-Build Epoxoline, DFT 4.0 to 6.0 mils ^{[1] [4] [16]}
 Total DFT: 8.0 to 12.0 mils

Interior Exposed

System Type: Acrylic-Epoxy/ Acrylic-Epoxy
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP1-3 ^[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

Interior Exposed

System Type: Epoxy/Epoxy ^[2]
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP1-3 ^[15]
 Primer: Series 84 Ceramlon ENV, DFT 5.0 to 8.0 mils
 Finish: Series 84 Ceramlon ENV, DFT 5.0 to 8.0 mils
 Total DFT: 10.0 to 16.0 mils

CONCRETE FLOORS

Light Traffic, Low Impact

System Type: Waterborne Epoxy/Waterborne Epoxy
 Surface Preparation: SSPC-SP13/NACE 6, ICRI CSP1-3 ^[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

NOTES:

Most products listed contain organic solvents. Tnemec manufactures products that comply with lower VOC restrictions. Please contact your Tnemec representative listed at www.Tnemec.com for specific product recommendations for compliance to local VOC regulations.

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

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

Exposure/Substrate

CONCRETE FLOORS (continued)

Light Traffic, Low Impact

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP3-9 ^[15]
Primer:	Series 201 Epoxoprime, DFT 6.0 - 8.0 mils
Intermediate:	Series 280 or 281 Tnemec-Glaze, DFT 6.0 to 8.0 mils
Finish:	(Optional) Series 280 or 281 Tnemec-Glaze, DFT 6.0 to 8.0 mils ^[7]
Total DFT:	12.0 to 24.0 mils plus filler

Moderate Chemical ^[2] & Abuse/Functional

System Type:	Epoxy/Aggregate Filled Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP3-9 ^[15]
Primer:	Series 201 Epoxoprime, DFT 6.0 - 8.0 mils
Intermediate:	Series 237 Power-Tread (Double Broadcast Application), DFT 1/8 inch
Finish:	Series 280 or 281 Tnemec-Glaze, DFT 6.0 to 8.0 mils ^[7]
Total DFT:	Nominal 1/8 inch system

Moderate Chemical ^[2] & Abuse/Decorative

System Type:	Epoxy/Ceramic Filled Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP3-9 ^[15]
Primer:	(Optional) Series 201 Epoxoprime, DFT 4.0 - 6.0 mils
Intermediate:	Series 222 Deco-Tread (Double Broadcast Application), DFT 1/8 inch
Finish:	Series 284 Tnemec-Glaze ^[11] , DFT 8.0 to 10.0 mils ^[7]
Total DFT:	Nominal 1/8 inch system

CONCRETE SECONDARY CONTAINMENT

Chemical & Elevated Temperatures, Immersion & Secondary Containment ^[2]

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

Floors, Severe Chemical, Abrasion & Traffic ^[2]

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6, ICRI CSP3-9 ^[15]
Primer:	(Optional) Series 201 Epoxoprime, DFT 6.0 - 8.0 mils
Intermediate:	Series 239 ChemTread (Trowel Applied), DFT 1/4 inch
Finish:	Series 282 Tnemec-Glaze, DFT 8.0 to 12.0 mils ^[7]
Total DFT:	Nominal 1/4 inch system

CONCRETE & MASONRY - POROUS CMU & CONCRETE

Exterior Exposed

System Type:	Acrylate/Acrylate/Acrylate
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP1-3 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill or 54-562 Masonry Filler, DFT 60 -80 sq ft/gal ^[6]
Intermediate:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils or Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils
Finish:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils or Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils
Total DFT:	8.0 to 16.0 mils or 12.0 to 18.0 mils plus filler

NOTES:

Most products listed contain organic solvents. Tnemec manufactures products that comply with lower VOC restrictions. Please contact your Tnemec representative listed at www.Tnemec.com for specific product recommendations for compliance to local VOC regulations.

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

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

Exposure/Substrate

CONCRETE & MASONRY - POROUS CMU & CONCRETE (continued)

Exterior Exposed

System Type:	Acrylic/Acrylic/Acrylic
Surface Preparation:	Concrete: SSPC-SP13/NACE 6, ICRI CSP1-3 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill, DFT 60 -80 sq ft/gal ^[6]
Intermediate:	Series 180 or 181 W.B. Tnemec-Crete, DFT 4.0 to 8.0 mils
Finish:	Series 180 or 181 W.B. Tnemec-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-SP 13/NACE 6 Clean and Dry
Primer:	Series 626 Dur A Pell GS, DFT 65 to 300 sq ft/gal ^[6]
Finish:	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-SP 13/NACE 6, ICRI CSP1-3 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill, DFT 60 -80 sq ft/gal ^[6]
Intermediate:	Series 113 or 114 H.B. Tnemec-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
Finish:	Series 113 or 114 H.B. Tnemec-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
Total DFT:	8.0 to 12.0 mils plus filler

Interior Exposed

System Type:	Epoxy/Epoxy
Surface Preparation:	Concrete: SSPC-SP 13/NACE 6, ICRI CSP1-3 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill, DFT 60 to 80 sq ft/gal
Intermediate:	Series N69 Hi-Build Epoxoline ^[1] , DFT 4.0 to 6.0 mils ^[4] ^[16]
Finish:	Series N69 Hi-Build Epoxoline ^[1] , DFT 4.0 to 6.0 mils ^[4] ^[16]
Total DFT:	8.0 to 12.0 mils plus filler

Interior Exposed

System Type:	Epoxy/Epoxy
Surface Preparation:	Concrete: SSPC-SP 13/NACE 6, ICRI CSP1-3 ^[15] CMU: Clean and Dry
Primer:	Series 130 Envirofill, DFT 60 -80 sq ft/gal ^[6]
Intermediate:	Series 84 Ceramlon ENV, DFT 5.0 to 8.0 mils
Finish:	Series 84 Ceramlon ENV, DFT 5.0 to 8.0 mils
Total DFT:	10.0 to 16.0 mils plus filler

NOTES:

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

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

Exposure/Substrate

INTERIOR GYPSUM WALLBOARD

Interior Exposed

System Type: Vinyl Acrylic/ Waterborne Epoxy or Waterborne Acrylic Epoxy
 Surface Preparation: Clean and Dry
 Primer: Series 151-1051 Elasto-Grip FC, DFT 1.0 - 2.0 mils
 Finish: Series 113 or 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[4]
 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: Series 270 Stranlok, DFT 25.0 to 40.0 or 273 Stranlok ML, DFT 20.0 to 25.0 mils with reinforcing mat
 Finish: 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 or Alkyd
 Surface Preparation: Clean and Dry
 Primer: Series 10-99W Tnemec Primer, DFT 2.0 to 3.5 mils or Series 151-1051 Elasto-Grip FC, DFT 1.0 to 2.0 mils
 Finish: Series 6 Tneme-Cryl or Series 1028 or 1029 Enduratone, DFT 2.0 to 3.0 mils ^[4]
 Total DFT: 4.0 to 6.5 mils or 3.0 to 5.0 mils

NOTES:

Most products listed contain organic solvents. Tnemec manufactures products that comply with lower VOC restrictions. Please contact your Tnemec representative listed at www.Tnemec.com for specific product recommendations for compliance to local VOC regulations.

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

POTABLE WATER APPLICATIONS: Water contact surfaces in potable water treatment plants usually require coatings certified to ANSI/NSF 61. The following substitutions apply:

Series N69	Series N140 Pota-Pox Plus
Series 262	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 R2.

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 98-09 R2, ASTM D 6386.

⁹ Coverage 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 a gloss finish.

¹² For a premier fluoropolymer finish use Series 700 or 701 HydroFlon.

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

¹⁴ Use 120-5003 for filling voids/surfacing prior to application of the Vinester prime coat.

¹⁵ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

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.

Additional coating systems are available. Contact your Tnemec representative and refer to Tnemec product data sheets or www.tnemec.com for more information.

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 6 Tneme-Cryl

EMULSIFIED ACRYLIC COATING

Fast-dry, water-based finish ideally suited for a variety of masonry applications. Provides good color and gloss retention.

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 Typoxy®

EPOXY POLYAMIDE COATING

A versatile low-temperature coating ideally suited for steel 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

44-700 Epoxy Accelerator and 44-710 Urethane Accelerator are special additives used to quicken the cure rate of several Tnemec coatings plus all 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.

63-1500 Filler/Surfacer

SOLVENTLESS CATALYZED EPOXY

Non-shrinking, trowel-grade filler and surfacer typically used to fill pits and voids and to seal seams, rivets and bolt heads. Outstanding resistance to abrasion, impact and water.

Series N69 Hi-Build Epoxoline II

POLYAMIDOAMINE EPOXY COATING

High-solids epoxy with performance characteristics similar to Series 66 Hi-Build Epoxoline plus it's VOC-compliant at 2.3 lbs./gal. 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 exterior finishes available in a virtually unlimited color range. High-build characteristics allow for single-coat coverage at 5.0 dry mils when spray-applied. Also used as conventional roller/brush/spray-applied coatings at 2.0 - 3.0 mils dry. Series 1074 and 1075 conform with strict air pollution regulations.

Series 84 Ceramlon ENV

MODIFIED ALIPHATIC AMINE EPOXY

A high-build, ceramic-like coating that provides excellent protection and easy cleaning. May be applied to both steel and concrete providing excellent resistance to abrasion, staining and many chemicals. NOT FOR IMMERSION SERVICE.

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 provide 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 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 provide long-term protection against weather, driving rain and alternate freeze-thawing. Available in smooth or textured finishes and a variety of colors.

Series 201 Epoxoprime®

POLYAMINE EPOXY PRIMER

Multipurpose, high-solids epoxy coating primarily used as a primer for 100% solids epoxy systems such as Stranlok and Chemtread. 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.

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 239 ChemTread® MODIFIED NOVOLAC POLYAMINE EPOXY

A highly chemical and heat-resistant, multi-purpose, broadcast or mortar applied floor topping system installed at 1/8" to 1/4" thickness.

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 systems. 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 Satinglaze® 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-Tread® 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 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 and fume 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 626 Dur A Pell GS RTV SILICONE RUBBER

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 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

Clear, filmless, penetrating 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. Resists water and chloride ion intrusion, stain damage, freeze/thaw spalling, efflorescence and rust damage.

Series 700 & 701 HydroFlon® FLUOROPOLYMER POLYURETHANE

An exterior finish coat especially designed for tanks and structural steel. HydroFlon has outstanding resistance to ultra-violet light degradation providing unprecedented long-term gloss and color retention with excellent resistance to abrasion and chalking.

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.



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	11WH 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



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WARRANTY INFORMATION: The service life of Tnemec's coatings will vary. For warranty, limitation of sellers' liability, and product information, please refer to Tnemec's product data sheets or contact your Tnemec representative.

HEALTH AND SAFETY INFORMATION: For important health and safety information regarding the use of Tnemec's products, please read the container label warning and MSDS. Published technical data and instructions are subject to change without notice. Contact your Tnemec representative for current technical data and instructions, or visit our website. 12/07