



SYSTEMS GUIDE

TO HIGH PERFORMANCE COATINGS FOR
INDUSTRIAL COATING APPLICATIONS

TNEMEC COMPANY, INC.

6800 Corporate Drive, Kansas City, MO 64120
1-800-TNEMEC1 www.tnemec.com

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. 11/10/2015

TABLE OF CONTENTS

Interior Steel.....	1
Exterior Steel.....	1-2
Interior Concrete and Masonry.....	2-3
Interior Concrete Floors.....	3-4
Concrete Secondary Containment.....	4
Exterior Concrete and Masonry.....	4-5
Stucco.....	5
Interior Galvanized Steel.....	5
Interior and Exterior Galvanized Steel.....	5
Interior Gypsum Board.....	6
Steel Process Equipment.....	6
Tank Linings.....	6

INNOVATION IN EVERY COAT.™

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

INTERIOR STEEL

UP TO 12 MONTHS FIELD EXPOSURE OF STEEL, ENCLOSED

System Type:	MIO-Zinc Urethane
Surface Preparation:	SSPC-SP3 (Rust Grade Condition C)
Primer:	Series 394 PerimePrime, DFT 2.5 to 3.5 mils
Finish Coat:	None required
Total DFT:	2.5 to 3.5 mils

UP TO 12 MONTHS FIELD EXPOSURE OF SHOP PRIMER AND/OR DRY INTERIOR, ENCLOSED

System Type:	Alkyd/Acrylic/Acrylic
Surface Preparation:	SSPC-SP2/3
Primer:	Series 10 Tnemec Primer or Series 37H Chem-Prime H.S, DFT 2.0 to 3.5 mils
Intermediate Coat:	Series 1028 or 1029 Enduratone, DFT 2.0 to 3.0 mils ^[2]
Finish Coat:	Series 1028 or 1029 Enduratone, DFT 2.0 to 3.0 mils ^[2]
Total DFT:	6.0 to 9.5 mils

WET AND/OR CORROSIVE FUMES, PHYSICAL ABUSE

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 3.0 to 5.0 mils ^{[2] [9]}
Finish Coat:	Series N69 Hi-Build Epoxoline II, DFT 4.0 to 6.0 mils ^{[2] [9]}
Total DFT:	7.0 to 11.0 mils

WET, CORROSIVE FUMES, STAIN EXPOSURE, PHYSICAL ABUSE

System Type:	Zinc-Rich Urethane/Epoxy/Polyurethane
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series 90-97 Tneme-Zinc, DFT 2.5 to 3.5 mils
Intermediate Coat:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 4.0 to 6.0 mils ^{[2] [9]}
Finish Coat:	Series 73, Series 1074 or Series 1075 Endura-Shield, DFT 2.0 to 3.0 mils ^{[2] [5]}
Total DFT:	8.5 to 12.5 mils

EXTERIOR STEEL

MILD ATMOSPHERIC

System Type:	Alkyd/Acrylic/Acrylic
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series 10 Tnemec Primer, DFT 2.0 to 3.5 mils
Intermediate Coat:	Series 1028 or 1029 Enduratone, DFT 2.0 to 3.0 mils ^[2]
Finish Coat:	Series 1028 or 1029 Enduratone, DFT 2.0 to 3.0 mils ^[2]
Total DFT:	6.0 to 9.5 mils

Additional coating 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.

1 For high gloss, specify Series 2H Tneme-Gloss.

2 Depending upon the color of the primer/intermediate coat or method of application, additional coats may be required to achieve film thickness and/or hiding.

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

4 Some exterior stucco or plaster finishes may not require Series 151 primer. Contact Tnemec Technical Services for additional information.

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

6 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 the latest edition of Tnemec Technical Bulletin 10-78, ASTM D6386.

7 Used for field priming of steel.

8 Series 1077 & 1078 metallics are recommended for air spray applications only. Touch-up by brushing or rolling may create a noticeably different finish.

9 Series L69 or V69 may be substituted when lower VOC or HAPS levels are needed.

10 Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

11 Use Series 206 over primer where a crack-bridging membrane is needed.

12 Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

13 Series 237 can be used in lieu of Series 222 for slurry broadcast or double broadcast applications and Series 233 for mortar applications.

14 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.

15 Coverage may vary depending on density of the substrate.

16 Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

17 Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

18 System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations. Reference SSPC-TU3 or the latest edition of Tnemec Technical Bulletin 98-10.

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.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

EXTERIOR STEEL (CONTINUED)

ATMOSPHERIC, CHEMICAL, STANDARD UV PROTECTION

System Type:	Epoxy/Epoxy/Polyurethane
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 3.0 to 5.0 mils ^[9]
Intermediate Coat:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils ^[21] ^[9]
Finish Coat:	Series 73, 1074 or 1075 Endura-Shield ^[5] or Series 1077 ^[8] Enduralume, DFT 2.0 to 5.0 mils ^[2]
Total DFT:	7.0 to 13.0 mils

System Type:	Zinc-Rich Urethane/Epoxy/Polyurethane
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series 90-97 Tneme-Zinc, DFT 2.5 to 3.5 mils
Intermediate Coat:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils ^[21] ^[9]
Finish Coat:	Series 73, 1074 or 1075 Endura-Shield ^[5] , DFT 2.0 to 5.0 mils ^[2]
Total DFT:	6.5 to 11.5 mils

AGGRESSIVE CORROSION, EXTENDED UV PROTECTION

System Type:	Zinc-Rich Urethane/Epoxy/Fluoropolymer
Surface Preparation:	SSPC-SP6/NACE 3
Primer:	Series 90-97 Tneme-Zinc, DFT 2.5 to 3.5 mils
Intermediate Coat:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils ^[21] ^[9]
Finish Coat:	Series 1070, 1071, 1072 Fluoronar, DFT 2.0 to 3.0 mils
Total DFT:	6.5 to 9.5 mils

MARGINALLY PREPARED SURFACES

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	Contact Tnemec for recommendation. ^[18]
Primer:	Series 135 ChemBuild, DFT 4.0 to 6.0 mils or Series 118 Uni-Bond Mastic, DFT 6.0 to 8.0 mils
Intermediate:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^[21] ^[9]
Finish:	Series N69 Hi-Build Epoxoline II, DFT 3.0 to 5.0 mils ^[21] ^[9]
Total DFT:	10.0 to 16.0 mils

INTERIOR CONCRETE & MASONRY

MILD TO MODERATE EXPOSURE, OCCASIONALLY DAMP

System Type:	Acrylic-Epoxy/Acrylic-Epoxy
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 113 H.B. or 114 H.B. Tneme-Tufcoat ^[3] , DFT 4.0 to 6.0 mils ^[2]
Finish Coat:	Series 113 H.B. or 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[2]
Total DFT:	8.0 to 12.0 mils ^[15]

Additional coating 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.

1 For high gloss, specify Series 2H Tneme-Gloss.

2 Depending upon the color of the primer/intermediate coat or method of application, additional coats may be required to achieve film thickness and/or hiding.

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

4 Some exterior stucco or plaster finishes may not require Series 151 primer. Contact Tnemec Technical Services for additional information.

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

6 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 the latest edition of Tnemec Technical Bulletin 10-78, ASTM D6386.

7 Used for field priming of steel.

8 Series 1077 & 1078 metallics are recommended for air spray applications only. Touch-up by brushing or rolling may create a noticeably different finish.

9 Series L69 or V69 may be substituted when lower VOC or HAPS levels are needed.

10 Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

11 Use Series 206 over primer where a crack-bridging membrane is needed.

12 Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

13 Series 237 can be used in lieu of Series 222 for slurry broadcast or double broadcast applications and Series 233 for mortar applications.

14 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.

15 Coverage may vary depending on density of the substrate.

16 Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

17 Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

18 System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations. Reference SSPC-TU3 or the latest edition of Tnemec Technical Bulletin 98-10.

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.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

INTERIOR CONCRETE & MASONRY (CONTINUED)

MODERATE TO SEVERE CONDITIONS, PHYSICAL CONTACT, ABUSE

System Type:	Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 66HS Hi-Build Epoxoline ^[3] , DFT 4.0 to 8.0 mils ^[2]
Finish Coat:	Series 66HS Hi-Build Epoxoline, DFT 4.0 to 8.0 mils ^[2]
Total DFT:	8.0 to 16.0 mils ^[15]

SEVERE CONDITIONS, PUBLIC AREAS OR PREPARATION AREAS FREQUENTLY CLEANED OR WET

System Type:	Epoxy/Epoxy
Surface Preparation:	Concrete: SSPC-SP13/NACE 6 ^[10] , CMU: Clean and Dry
Primer:	Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils ^[2] ^[3]
Finish Coat:	Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils ^[2]
Total DFT:	12.0 to 16.0 mils ^[15]

INTERIOR CONCRETE FLOORS

MILD TO MODERATE ABUSE, FOOT TRAFFIC, CHEMICAL CONTACT

System Type:	Epoxy/Epoxy/Polyurethane
Surface Preparation:	Shot Blast or Mechanically Abrade - ICRI CSP 3-5 ^[10]
Primer:	Series 201 Epoxoprime, DFT 6.0 to 8.0 mils
Intermediate Coat:	Series 280 or 281 Tneme-Glaze, DFT 6.0 to 8.0 mils
Finish Coat (Optional):	Series 290 or 291 CRU (optional), DFT 2.0 to 3.0 mils
Total DFT:	12.0 to 19.0 mils

MODERATE ABUSE, WET, CHEMICAL CONTACT

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	Shot Blast or Mechanically Abrade - ICRI CSP 4-6 ^[10]
Primer (Optional):	Series 201 Epoxoprime ^[11] , DFT 6.0 to 8.0 mils
Intermediate Coat:	Series 237 Power-Tread or Series 238 Power-Tread FC ^[12] (double broadcast or slurry/broadcast, DFT 1/8 inch)
Finish Coat:	Series 280 or 281 Tneme-Glaze ^[14] , DFT 8.0 to 12.0 mils
Total DFT:	Nominal 1/8 inch system

HEAVY ABUSE, WET, CHEMICAL CONTACT

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	Shot Blast or Mechanically Abrade - ICRI CSP 4-6 ^[10]
Primer (Optional):	Series 201 Epoxoprime ^[10] , DFT 6.0 to 8.0 mils
Intermediate Coat:	Series 239 Chem-Tread (trowel-applied mortar, DFT 1/4 inch)
Finish Coat:	Series 282 Tneme-Glaze, DFT 8.0 to 12.0 mils
Total DFT:	Nominal 1/4 inch system

Additional coating 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.

1 For high gloss, specify Series 2H Tneme-Gloss.

2 Depending upon the color of the primer/intermediate coat or method of application, additional coats may be required to achieve film thickness and/or hiding.

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

4 Some exterior stucco or plaster finishes may not require Series 151 primer. Contact Tnemec Technical Services for additional information.

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

6 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 the latest edition of Tnemec Technical Bulletin 10-78, ASTM D6386.

7 Used for field priming of steel.

8 Series 1077 & 1078 metallics are recommended for air spray applications only. Touch-up by brushing or rolling may create a noticeably different finish.

9 Series L69 or V69 may be substituted when lower VOC or HAPS levels are needed.

10 Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

11 Use Series 206 over primer where a crack-bridging membrane is needed.

12 Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

13 Series 237 can be used in lieu of Series 222 for slurry broadcast or double broadcast applications and Series 233 for mortar applications.

14 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.

15 Coverage may vary depending on density of the substrate.

16 Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

17 Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

18 System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations. Reference SSPC-TU3 or the latest edition of Tnemec Technical Bulletin 98-10.

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.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

INTERIOR CONCRETE FLOORS (CONTINUED)

SEVERE EXPOSURE, HEAVY TRAFFIC OR ABUSE, WET, CHEMICAL CONTACT, THERMAL SHOCK

System Type:	Polyurethane Modified Concrete/Epoxy
Surface Preparation:	Shot Blast or Mechanically Abrade - ICRI CSP 5-9 ^[10]
Coating System:	Series 245 Ultra-Tread S ^{[16][17]} (slurry), DFT 3/16" (minimum 1/8", maximum of 1/2")
Topcoat (Optional):	Series 282 Tneme-Glaze or Series 286 Deco-Clear CR, DFT 8.0 to 12.0 mils (These topcoats may only be used when recommended aggregate has been broadcast into the Series 245 prior to topcoating).
Total DFT:	Nominal 3/16" to 1/4" System

System Type:	Polyurethane Modified Concrete
Surface Preparation:	Shot Blast or Mechanically Abrade - ICRI CSP 5-9 ^[10]
Coating System:	Series 244 Ultra-Tread M ^{[16][17]} (trowel-applied mortar), DFT 1/4" (minimum 3/16", maximum of 1/2")
Total DFT:	Nominal 1/4" System

CONCRETE SECONDARY CONTAINMENT

FLOORS, SEVERE CHEMICAL, ABRASION & TRAFFIC ^[2]

System Type:	Epoxy/Epoxy/Epoxy
Surface Preparation:	SSPC-SP13/NACE 6 - ICRI CSP 3-9 ^[10]
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
Total DFT:	Nominal 125.0 mils

EXTERIOR CONCRETE & MASONRY

MILD TO MODERATE

System Type:	Siloxane/Acrylic
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 662 Prime-A-Pell Plus, DFT Penetrant ^[15]
Finish Coat:	Series 607 Conformal Stain, DFT 0.5 to 2.5 mils
Total DFT:	0.5 to 2.5 mils

System Type:	Acrylic/Acrylic
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils ^{[3] [15]}
Finish Coat:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils ^[15]
Total DFT:	8.0 to 16.0 mils

MODERATE TO SEVERE, GRAFFITI PROTECTION

System Type:	RTV Silicone
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 626 Dur A Pell GS, DFT 125 to 150 sq ft/gal ^[15]
Finish Coat:	Series 626 Dur A Pell GS, DFT 125 to 150 sq ft/gal ^[15]
Total DFT:	62.5 to 75 sq ft/gal

Additional coating 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.

1 For high gloss, specify Series 2H Tneme-Gloss.

2 Depending upon the color of the primer/intermediate coat or method of application, additional coats may be required to achieve film thickness and/or hiding.

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

4 Some exterior stucco or plaster finishes may not require Series 151 primer. Contact Tnemec Technical Services for additional information.

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

6 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 the latest edition of Tnemec Technical Bulletin 10-78, ASTM D6386.

7 Used for field priming of steel.

8 Series 1077 & 1078 metallics are recommended for air spray applications only. Touch-up by brushing or rolling may create a noticeably different finish.

9 Series L69 or V69 may be substituted when lower VOC or HAPS levels are needed.

10 Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

11 Use Series 206 over primer where a crack-bridging membrane is needed.

12 Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

13 Series 237 can be used in lieu of Series 222 for slurry broadcast or double broadcast applications and Series 233 for mortar applications.

14 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.

15 Coverage may vary depending on density of the substrate.

16 Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

17 Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

18 System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations. Reference SSPC-TU3 or the latest edition of Tnemec Technical Bulletin 98-10.

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.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

EXTERIOR CONCRETE & MASONRY (CONTINUED)

MODERATE TO SEVERE

System Type:	Acrylate/Acrylate
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils or Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils ^[3] ^[15]
Finish Coat:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils or Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils ^[15]
Total DFT:	8.0 to 16.0 mils or 12.0 to 18.0 mils

STUCCO

MILD TO MODERATE

System Type:	Acrylic/Acrylic
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 180 or 181 W.B. Tneme-Crete, DFT 4.0 to 8.0 mils ^[3]
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

MILD TO SEVERE

System Type:	Water-Based Epoxy/Acrylate/Acrylate
Surface Preparation:	SSPC-SP13/NACE 6 ^[10]
Primer:	Series 151-1051 Elasto-Grip FC, DFT 1.0 to 2.5 mils ^[4]
Intermediate Coat:	Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils or Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils
Finish Coat:	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:	9.0 to 18.5 mils or 13.0 to 20.5 mils

INTERIOR GALVANIZED STEEL

OVERHEAD DECK, DUCTWORK, CONDUIT, DRY

System Type:	Acrylic
Surface Preparation:	Contact Tnemec for recommendation. ^[6]
Finish Coat:	Series 115 Uni-Bond DF, DFT 2.0 to 3.5 mils
Total DFT:	2.0 to 3.5 mils

INTERIOR & EXTERIOR GALVANIZED STEEL

MILD TO MODERATE CONDITIONS AND/OR UV EXPOSURE

System Type:	Epoxy/Polyurethane
Surface Preparation:	Contact Tnemec for recommendation. ^[6]
Primer:	Series N69 Hi-Build Epoxoline II or Series 27 F.C. Typoxy, DFT 2.0 to 3.0 mils ^[2] ^[9]
Finish Coat:	Series 73, 1074 or 1075 Endura-Shield ^[5] , DFT 2.0 to 3.0 mils ^[2]
Total DFT:	4.0 to 6.0 mils

Additional coating 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.

1 For high gloss, specify Series 2H Tneme-Gloss.

2 Depending upon the color of the primer/intermediate coat or method of application, additional coats may be required to achieve film thickness and/or hiding.

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

4 Some exterior stucco or plaster finishes may not require Series 151 primer. Contact Tnemec Technical Services for additional information.

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

6 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 the latest edition of Tnemec Technical Bulletin 10-78, ASTM D6386.

7 Used for field priming of steel.

8 Series 1077 & 1078 metallics are recommended for air spray applications only. Touch-up by brushing or rolling may create a noticeably different finish.

9 Series L69 or V69 may be substituted when lower VOC or HAPS levels are needed.

10 Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

11 Use Series 206 over primer where a crack-bridging membrane is needed.

12 Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

13 Series 237 can be used in lieu of Series 222 for slurry broadcast or double broadcast applications and Series 233 for mortar applications.

14 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.

15 Coverage may vary depending on density of the substrate.

16 Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

17 Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

18 System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations. Reference SSPC-TU3 or the latest edition of Tnemec Technical Bulletin 98-10.

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.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

INTERIOR GYPSUM BOARD

MODERATE CONDITIONS DRY

System Type:	Water-Based Epoxy/Acrylic-Epoxy
Surface Preparation:	Clean and Dry
Primer:	Series 151-1051 Elasto-Grip FC, DFT 1.0 to 2.0 mils
Finish Coat:	Series 113 H.B. Tneme-Tufcoat or Series 114 H.B. Tneme-Tufcoat, DFT 4.0 to 6.0 mils ^[2]
Total DFT:	5.0 to 8.0 mils

STEEL PROCESS EQUIPMENT - TANKS, PIPES, VALVES

MILD TO MODERATE CONDITIONS AND/OR UV EXPOSURE

System Type:	Water-Based Epoxy/Insulative Coating/Acrylic
Surface Preparation:	Clean and Dry
Primer:	Series 1224 Epoxoline WB, DFT 6.0 to 8.0 mils
Intermediate Coat:	Series 971 Aerolon Acrylic, DFT 100.0 to 150.0 mils
Finish Coat:	Series 1028T Enduratone, DFT 2.0 to 4.0 mils
Total DFT:	108.0 to 162.0 mils

TANK LININGS

STORAGE OF HYDROCARBONS SUCH AS OIL AND FINISHED FUELS

System Type:	Polyamine Epoxy
Surface Preparation:	SSPC-SP10/NACE 2
Primer (Optional):	Series 61 Tneme-Liner, 6.0 to 8.0 mils
Finish Coat:	Series 335 Tank Armor, 20.0 to 50.0 mils
Total DFT:	26.0 to 58.0 mils

STORAGE OF AGGRESSIVE CHEMICAL CARGO

System Type:	Polyamine Epoxy
Surface Preparation:	SSPC-SP5/NACE 1
Finish Coat:	Series 391 Tank Armor, 20.0 to 40.0 mils
Total DFT:	20.0 to 40.0 mils

Additional coating 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.

1 For high gloss, specify Series 2H Tneme-Gloss.

2 Depending upon the color of the primer/intermediate coat or method of application, additional coats may be required to achieve film thickness and/or hiding.

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

4 Some exterior stucco or plaster finishes may not require Series 151 primer. Contact Tnemec Technical Services for additional information.

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

6 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 the latest edition of Tnemec Technical Bulletin 10-78, ASTM D6386.

7 Used for field priming of steel.

8 Series 1077 & 1078 metallics are recommended for air spray applications only. Touch-up by brushing or rolling may create a noticeably different finish.

9 Series L69 or V69 may be substituted when lower VOC or HAPS levels are needed.

10 Reference SSPC-SP13/NACE 6 and ICRI Guideline No. 310.2.

11 Use Series 206 over primer where a crack-bridging membrane is needed.

12 Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

13 Series 237 can be used in lieu of Series 222 for slurry broadcast or double broadcast applications and Series 233 for mortar applications.

14 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.

15 Coverage may vary depending on density of the substrate.

16 Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

17 Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

18 System recommendations will vary depending on the generic type and condition of the existing system. Please contact your Tnemec representative for an overcoat risk assessment and specific recommendations. Reference SSPC-TU3 or the latest edition of Tnemec Technical Bulletin 98-10.

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.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

SERIES 10 TNE MEC® 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 61 TNE ME-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 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 allow application in cooler temperatures.

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 AND 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 90-97 TNE ME-ZINC™

Zinc-Rich Urethane Primer

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

SERIES 113 & 114 H.B. TNE ME-TUF COAT™

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 115 UNI-BOND DF™

Self-Crosslinking Acrylic

One-coat, flash-rust and corrosion resistant primer/finish for dry interior overheads. Use on carbon and galvanized steel, aluminum, wood and concrete decks, beams, joists and HVAC. Will dry-fall under certain conditions.

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 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. TNE ME-CRETE®

Acrylic Emulsion Coatings

High-build, water-based coatings provide 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 237 & 238 POWER-TREAD®

Aggregate-Filled Polyamine Epoxy Floor

Topping

A multi-purpose, broadcast, slurry broadcast or mortar applied floor topping system installed at 1/8 inch to 1/4 inch thickness. Protects against impact, abrasion and mild chemicals. Specify Series 238 for fast cure.

SERIES 239SC CHEMBLOC®

Modified Novolac Polyamine Epoxy

A highly chemical and heat-resistant, multi-purpose, broadcast, slurry broadcast or mortar applied floor topping system installed at 1/8" to 1/4" thickness. Protects against impact, abrasion, heat and harsh chemicals.

SERIES 243, 244, 245 ULTRA-TREAD®

Polyamine Epoxy Coating

Low odor, trowelable mortars (Series 245 is a slurry mortar) with a high early strength. Resist chemicals, organic acids from food and withstand thermal shock due to hot liquids and aggressive cleaning procedures. Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

SERIES 280, 281 & 282 TNE ME-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 290 & 291 CRU™

Aliphatic Polyester Polyurethanes

Extremely hard, chemical-resistant urethane floor coatings with superb application characteristics and excellent color retention. Excellent resistance to abrasion, corrosive fumes and chemical contact.

SERIES 335 TANK ARMOR®

Polyamine Epoxy Coating

Internally reinforced, 100% solids epoxy lining that provides protection against corrosion and chemical attack in ground storage and transport tanks. Specified for use as a protective lining in finished fuels, sweet/sour crude and brine immersion exposures for above ground and transport tanks and pipelines. Provides long-term durability and corrosion control for extended service life.

SERIES 391 TANK ARMOR®

Polyamine Epoxy Coating

An internal epoxy lining formulated for aggressive chemical immersion and corrosion control of chemical tanks. Contains micro-fiber reinforcement for improved film integrity. Series 391 exhibits superior resistance to a wide range of chemicals, acids, and fractionation blends with excellent physical properties for long term durability and service life of transport and storage tanks.

SERIES 394 PERIMEPRIME®

Polyurethane, MIO-ZINC Filled Primer

High performance primer with a triple barrier mechanism of zinc, mio and urethane resin built into the dry film. Suitable as a corrosion resistant primer under certain fire-resistant materials.

SERIES 607 CONFORMAL™ STAIN

Acrylic Stain

A penetrating, solvent-based masonry stain for virtually all vertical, above-grade concrete, pre-cast, GFRC, exposed aggregate, stucco, terracotta, brick and block masonry.

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 662 PRIME-A-PELL® PLUS

Siloxane Water Repellent

A clear, filmless, penetrating water repellent for virtually all above-grade, vertical and horizontal concrete, stucco, block and brick masonry.

SERIES 971 AEROLON® ACRYLIC

Fluid-Applied Acrylic Insulation

Thermal insulating coating utilizing aerogel particles that impacts exceptional insulative properties to a variety of substrates. Ideal for insulating pipes, valves, tanks, structural steel, or other substrates where thermal improvement or personnel protection is desired.

INDUSTRIAL FACILITIES: SELECTION GUIDE FOR COATINGS

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 1070, 1071, 1072 & 1078 FLUORONAR®

Thermoset Solution Fluoropolymer

A thermoset solution fluoropolymer coating that provides the ultimate technology in durability, with exceptional color and gloss retention.

SERIES 1224 EPOXOLINE® WB

Inorganic Hybrid Water-Based Epoxy

Specifically formulated to provide a corrosion-resistant barrier under fluid-applied insulating coatings as well as traditional insulation.