



S Y S T E M S G U I D E
TO HIGH PERFORMANCE COATINGS FOR
F L O O R A P P L I C A T I O N S



A series of horizontal dashed lines for writing.

Everything Else
Is Just Paint.™

Exposure/Substrate

SEALERS/DUSTPROOFERS

Mild Abuse

System Type: Silicate Blend
 Surface Preparation: Clean and Dry
 Primer: Series 629 CT Densifyer, DFT 300 - 350 sq ft/gal
 Finish: Series 629 CT Densifyer, DFT 350 - 400 sq ft/gal
 Total DFT: Penetrant 150 - 200 sq ft/gal

COATINGS

Mild, Foot Traffic

System Type: Waterborne Epoxy/Waterborne Urethane
 Surface Preparation: Acid Etch, Light Shot Blast or Mechanically Abrade^[3] ICRI CSP 1-3
 Primer: Series 287 Enviro-Tread, DFT 2.0 to 4.0 mils
 Intermediate: Series 287 Enviro-Tread, DFT 2.0 to 4.0 mils
 Finish Coat (optional): Series 297 CRU, DFT 2.0 to 3.0 mils
 Total DFT: 6.0 to 11.0 mils

Mild, Foot Traffic, Occasionally Wet

System Type: Epoxy/Urethane
 Surface Preparation: Acid Etch, Light Shot Blast or Mechanically Abrade^[3] ICRI CSP 1-3
 Primer: Series 205 Terra-Tread FC, DFT 3.0 - 5.0 mils
 Intermediate: Series 205 Terra-Tread FC, DFT 3.0 - 5.0 mils
 Finish (optional): Series 290 or 291 CRU, DFT 2.0 - 3.0 mils
 Total DFT: 6.0 to 13.0 mils

Mild, Foot Traffic, Clear Sealer, Occasionally Wet

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade^[3] ICRI CSP 3-5
 Primer: Series 201 Epoxoprime^[1], DFT 6.0 to 12.0 mils
 Finish Coat (optional): Series 201 Epoxoprime, DFT 6.0 to 12.0 mils
 Total DFT: 6.0 to 24.0 mils

Mild to Moderate Abuse, Foot Traffic, Chemical Exposure; Orange-Peel Finish

System Type: Epoxy/Urethane
 Surface Preparation: Shot Blast or Mechanically Abrade^[3] ICRI CSP 3-5
 Primer: Series 201 Epoxoprime^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils
 Finish Coat (optional): Series 290 or 291 CRU, DFT 2.0 to 3.0 mils
 Total DFT: 12.0 to 19.0 mils

Mild to Moderate Abuse, Foot Traffic, Chemical Exposure; Smooth Finish

System Type: Epoxy/Urethane
 Surface Preparation: Shot Blast or Mechanically Abrade^[3] ICRI CSP 3-5
 Primer: Series 201 Epoxoprime^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 281 Tneme-Glaze, DFT 6.0 to 20.0 mils
 Finish Coat (optional): Series 290 or 291 CRU, DFT 2.0 to 3.0 mils
 Total DFT: 12.0 to 31.0 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.

Refer to the StrataShield Installation and Application Guide for floors.

- ¹ Use Series 206 over primer where a crack-bridging membrane is needed.
- ² Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 294 or 295 Clear CRU as a finish coat for added stain and abrasion resistance.
- ³ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.
- ⁴ Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming.)
- ⁵ Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.
- ⁶ A primer color should be selected that complements the flake color.
- ⁷ When broadcasting to refusal, an additional coat of Series 284 is needed with light sanding between coats.
- ⁸ Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming.)
- ⁹ Specify Series 238 Power-Tread FC for fast-cure.
- ¹⁰ If Series 285 or 295 is selected for the finish coat, an intermediate coat of Series 284 is required.

¹¹ Use Series 218 or 219 as a filler or patcher if needed.

¹² Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

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.

Most products listed contain organic solvents. Contact your Tnemec representative for compliance to local VOC regulations.

Exposure/Substrate

COATINGS (continued)

Moderate to Severe Abuse, Chemical Exposure

System Type: Epoxy/Novolac Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 3-5
 Primer: Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils
 Finish Coat: Series 282 Tneme-Glaze, DFT 6.0 to 12.0 mils
 Total DFT: 18.0 to 28.0 mils

LAMINATE SYSTEMS

Mild to Moderate Abuse, Decorative, Chemical Exposure

System Type: Epoxy (random flake broadcast)
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 3-5
 Primer: Series 281 Tneme-Glaze ^[6], DFT 8.0 to 12.0 mils
 Intermediate Coat: Series 224 Deco-Flake (broadcast flake randomly)
 Finish Coat: Series 224 Deco-Fleck or 284 Deco-Clear ^{[2][7][10]}, DFT 8.0 to 12.0 mils
 Total DFT: 16.0 to 24.0 mils

Mild to Moderate Abuse, Decorative, Chemical Exposure

System Type: Epoxy (refusal flake broadcast)
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 3-5
 Primer: Series 281 Tneme-Glaze ^[7], DFT 8.0 to 12.0 mils
 Intermediate Coat: Series 224 Deco-Flake (broadcast flake to refusal)
 Finish Coat: Series 224 Deco-Fleck or 284 Deco-Clear ^{[2][7][10]}, DFT 8.0 to 12.0 mils
 Total DFT: 16.0 to 24.0 mils

Mild to Moderate Abuse, Foot Traffic, Chemical Exposure

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 3-6
 Primer: Series 201 Epoxoprime, DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 210 Even-Flow SL, DFT 30.0 to 100.0 mils
 Finish Coat (optional): Series 290 or 291 CRU ^[2], DFT 2.0 to 3.0 mils
 Total DFT: 38.0 to 111.0 mils

Moderate Abuse, Decorative, Wet, Chemical Exposure

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 4-6
 Primer (optional): Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 222 Deco-Tread ^[4] (double broadcast or slurry/broadcast), DFT 1/8"
 Finish Coat: Series 284 Deco-Clear ^{[2][7][10]}, DFT 8.0 to 12.0 mils
 Total DFT: Nominal 1/8" System

Moderate Abuse, Forklift Traffic, Wet, Chemical Exposure

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 4-6
 Primer (optional): Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 237 Power-Tread ^[9] (double broadcast or slurry/broadcast), DFT 1/8"
 Finish: Series 280 Tneme-Glaze, DFT 8.0 to 12.0 mils
 Total DFT: Nominal 1/8" System

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.

Refer to the StrataShield Installation and Application Guide for floors.

¹ Use Series 206 over primer where a crack-bridging membrane is needed.

² Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 294 or 295 Clear CRU as a finish coat for added stain and abrasion resistance.

³ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

⁴ Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming.)

⁵ Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

⁶ A primer color should be selected that complements the flake color.

⁷ When broadcasting to refusal, an additional coat of Series 284 is needed with light sanding between coats.

⁸ Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming).

⁹ Specify Series 238 Power-Tread FC for fast-cure.

¹⁰ If Series 285 or 295 is selected for the finish coat, an intermediate coat of Series 284 is required.

¹¹ Use Series 218 or 219 as a filler or patcher if needed.

¹² Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

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.

Most products listed contain organic solvents. Contact your Tnemec representative for compliance to local VOC regulations.

Exposure/Substrate

LAMINATE SYSTEMS (continued)

Moderate Abuse, Forklift Traffic, Wet, High Chemical Exposure

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 4-6
 Primer (optional): Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 239 Power-Tread (double broadcast or slurry/broadcast), DFT 1/8"
 Finish: Series 282, DFT 8.0 to 12.0 mils
 Total DFT: Nominal 1/8" System

MORTAR SYSTEM

Severe Exposure, Heavy Traffic or Abuse, Wet, Chemical Contact, Thermal Shock

System Type: Polyurethane Modified Concrete
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 5-9
 Coating System: Series 244 Ultra-Tread M ^{[5][11][12]}, DFT 1/4" (minimum 3/16", maximum of 1/2")
 Total DFT: Nominal 1/4" System

Severe Exposure, Heavy Traffic or Abuse, Wet, Chemical Contact, Thermal Shock

System Type: Polyurethane Modified Concrete
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 5-9
 Coating System: Series 245 Ultra-Tread S ^{[5][11][12]} (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" System

Severe Exposure, Heavy Traffic or Abuse, Wet, Chemical Contact

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 4-9
 Primer (optional): Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 237 Power-Tread ^[9], DFT 1/4"
 Finish: Series 280 or 282, DFT 8.0 to 12.0 mils
 Total DFT: Nominal 1/4" System

Severe Exposure, Heavy Traffic or Abuse, Aggressive Chemical Contact

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 4-9
 Primer (optional): Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 239 Power-Tread, DFT 1/4"
 Finish: Series 282, DFT 8.0 to 12.0 mils
 Total DFT: Nominal 1/4" System

Moderate Abuse, Decorative, Wet, Chemical Exposure and Spills

System Type: Epoxy
 Surface Preparation: Shot Blast or Mechanically Abrade ^[3] ICRI CSP 4-9
 Primer: Series 201 Epoxoprime ^[1], DFT 6.0 to 8.0 mils
 Intermediate Coat: Series 223 Deco-Trowel, DFT 1/4"
 Finish Coat: Series 284 ^{[2][10]}, DFT 8.0 to 12.0 mils
 Total DFT: Nominal 1/4" System

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.

Refer to the StrataShield Installation and Application Guide for floors.

¹ Use Series 206 over primer where a crack-bridging membrane is needed.

² Topcoat with Series 285 Satinglaze for an orange-peel texture and satin finish. Use Series 294 or 295 Clear CRU as a finish coat for added stain and abrasion resistance.

³ Refer to SSPC-SP13/NACE 6 and ICRI Guideline No. 03732.

⁴ Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming.)

⁵ Series 243 is for vertical application needs in conjunction with horizontal applications of Series 244 or 245.

⁶ A primer color should be selected that complements the flake color.

⁷ When broadcasting to refusal, an additional coat of Series 284 is needed with light sanding between coats.

⁸ Slurry/broadcast application requires Series 201 as primer. (Standard double broadcast application is self-priming.)

⁹ Specify Series 238 Power-Tread FC for fast-cure.

¹⁰ If Series 285 or 295 is selected for the finish coat, an intermediate coat of Series 284 is required.

¹¹ Use Series 218 or 219 as a filler or patcher if needed.

¹² Before commencing, obtain and thoroughly read the StrataShield Application Guide for Polyurethane Modified Concrete.

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.

Most products listed contain organic solvents. Contact your Tnemec representative for compliance to local VOC regulations.

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 Power-Tread. Can also be used as a clear floor sealer.

Series 203 Epoxoprime® LV MODIFIED POLYAMINE PENETRATING EPOXY PRIMER

Low viscosity, high-solids, penetrating epoxy primer and sealer for use under thin-film flooring systems. Provides excellent bonding for concrete surfaces prepared by acid etching.

Series 205 Terra-Tread FC FLEXIBLE EPOXY

A fast-cure, versatile coating that can be used as a penetrating primer or a general duty topcoat. Can be applied in temperatures as low as 35°F (2°C).

Series 206 Sub-Flex EP FLEXIBLE EPOXY

Flexible epoxy underlayment for bridging small substrate cracks in concrete and to provide a protective membrane under aggregate reinforced flooring systems.

Series 210 Even-Flow SL® AGGREGATE-FILLED POLYAMINE EPOXY FLOOR TOPPING

A high-gloss, high-build, self-leveling floor coating that imparts an ultra smooth finish while providing protection from abrasion and frequent cleaning. Ideal for use on concrete substrates uneven from surface preparation. Applied at 30.0 - 100.0 mils.

Series 216 Quickfill ACRYLIC-MODIFIED CEMENT

Fast curing, aggregate reinforced material for surfacing and patching concrete substrates. Generally topcoated with a variety of high-performance epoxies for use in mild and aggressive exposures.

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 219 MortarCast™ WATER-BORNE EPOXY MODIFIED MORTAR

A high-performance, aggregate reinforced material for surfacing, patching and filling voids and bugholes in concrete substrates from 1/4" to 1-1/2".

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. Topcoated with Series 284 Deco-Clear and an optional Series 284 Satinglaze finish.

Series 223 Deco-Trowel® CERAMIC-FILLED MODIFIED POLYAMINE EPOXY FLOOR TOPPING

Decorative mortar flooring system installed at 1/4" minimum by trowel application. Protects against abrasion, impact and mild chemicals with an aesthetically pleasing, easy-to-clean surface. Topcoated with Series 284 Deco-Clear and an optional coat of Series 285 Satinglaze or Series 295 Clear CRU.

Series 224 Deco-Fleck® DECORATIVE EPOXY FLOOR TOPPING

An attractive and durable flooring system that locks a decorative flake under a clear epoxy resin. Protects against abrasion and mild chemicals with an easy-to-clean surface.

Series 237 Power-Tread® AGGREGATE-FILLED MODIFIED POLYAMINE EPOXY

This 100% solids, multipurpose resin can be combined with aggregate for double broadcast, slurry broadcast and mortar applications. Offers excellent application characteristics and protection from impact, abrasion and chemicals. This clear resin can be field tinted gray, red or beige.

Series 238 Power-Tread® FC AGGREGATE-FILLED MODIFIED POLYAMINE EPOXY

This fast cure, multi-purpose broadcast, slurry broadcast or mortar applied floor topping system installed at 1/8" to 1/4" thickness. Protects against impact, abrasion and mild chemicals.

Series 239 ChemTread® 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

A low-odor, floor topping system with high early strength. Resists chemicals, organic acids from food and withstands 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 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® MODIFIED POLYAMINE EPOXY COATING

Clear finish for use over the decorative flooring systems. Protects against mild chemicals, impact and abrasion. Depending on the number of coats, will provide a smooth or skid-resistant finish.

Series 285 Satinglaze® POLYAMINE EPOXY COATING

A clear satin finish with an "orange peel" texture for diffusing light and reducing glare - used with the decorative flooring systems. Protects against mild chemicals, impact and abrasion.

Series 286 Deco-Clear® CR MODIFIED NOVOLAC POLYAMINE EPOXY

A clear novolac finish for decorative flooring systems. It protects against harsh chemicals, impact and abrasion, providing a skid-resistant or smooth finish depending on the number of coats.

Series 287 Enviro-Tread® WATERBORNE EPOXY COATING

A user friendly, water-based epoxy coating that resists various chemicals and stands up to frequent cleaning. Its rapid cure and low odor properties make it ideally suited for maintenance work. Can be applied to substrates slightly damp from etching and cleaning preparations.

Series 290 & 291 CRU ALIPHATIC POLYESTER POLYURETHANE

Extremely hard, chemical-resistant urethane floor coatings with superb flow characteristics and excellent color retention. Excellent resistance to abrasion, corrosive fumes and chemical contact. Series 290 is a semi-gloss finish, 291 is gloss.

Series 294 & 295 Clear CRU ALIPHATIC POLYESTER POLYURETHANE

A clear version of Series 291 that shares the same resistance to abrasion and chemicals. Provides a protective topcoat to pigmented and decorative flooring systems. Series 294 is a satin finish, 295 is gloss.

Series 297 Enviro-Glaze WATERBORNE ALIPHATIC POLYURETHANE

Low odor, fast dry, low VOC, waterborne polyurethane coating for interior wall and floor applications. Provides enhanced abrasion resistance, stain resistance and color stability.

Series 629 CT Densifyer SILICATE BLEND

Clear, penetrating, water-based sealer for virtually all above-grade, horizontal, poured-in-place concrete. The solution penetrates the substrate and chemically reacts to increase density at the surface and dustproof concrete.

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 at www.tnemec.com. 05/06