



SURFACE PREPARATION AND APPLICATION GUIDE

SERIES 239SC CHEMBLOC®/282 TNAME-GLAZE
FIBERGLASS MAT REINFORCED MORTAR NOVOLAC
EPOXY LINING (MCK)

TNEMEC COMPANY INC

123 West 23rd Avenue North Kansas City, MO 64116
+1 816-483-3400 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. 10/2023

TABLE OF CONTENTS

Introduction.....	1
Overview.....	1
Job Setup.....	1
Equipment.....	1
Surface Preparation.....	1-2
Primer Installation.....	2
Basecoat Application.....	2-4
Saturant Coat Installation.....	4
Topcoat Installation.....	5
UV Resistant Topcoat.....	5
Inspection.....	5-6
Repair.....	6
Curing.....	6
Clean Up.....	6
Storage & Handling.....	6
Safety.....	6

INNOVATION IN EVERY COAT.™

1.0 INTRODUCTION

The purpose of this guide is to acquaint contractors and applicators with the basic information necessary for properly ordering, storing and installing Tnemec's Series 239SC ChemBloc/282 Tnemec-Glaze Fiberglass Mat Reinforced Mortar Polyamine Epoxy Lining (MCK) system. Prior to starting work, please read this entire guide carefully. This application guide cannot cover every issue that may be encountered in the field. If you have questions, please contact your Tnemec representative or call +1-816-483-3400 for assistance. It is important that you obtain answers to any questions before work begins.

Please review all pertinent product data sheets. Also, reference the project specifications and compare them with the product data sheet. Resolve any inconsistencies prior to starting work.

2.0 OVERVIEW

Series 239SC/282 is a 125 mil (3175 microns) trowel-applied, fiberglass mat reinforced, multi-functional, 100% solids, novolac epoxy secondary containment system. The following contains information on the core components of this system.

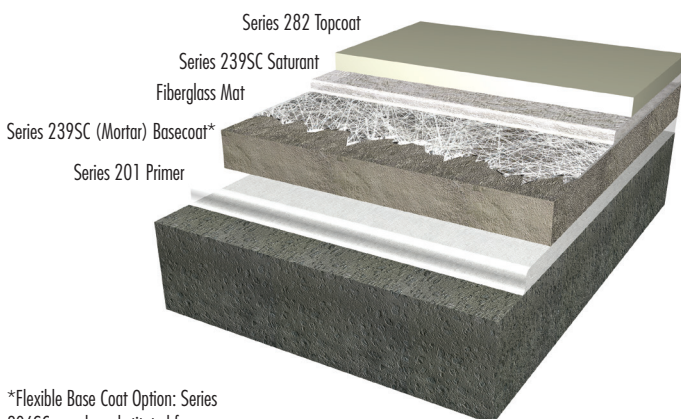
System Overview:

- Primer: Series 201 at 4.0 to 12.0 mils (100 to 305 microns)
- Base Coat: Series 239SC (Mortar) at 60.0 to 80.0 mils (1525 to 2030 microns)
- Fiberglass Reinforcement: 3/4 oz. chopped strand fiberglass mat
- Saturant Coat: Series 239SC (Resin) at 16.0 to 24.0 mils (405 to 610 microns)
- Topcoat: Series 282 at 6.0 to 12.0 mils (150 to 305 microns)

3.0 JOB SET-UP

Prior to starting project installation, note the following:

- Itemize all materials ordered from Tnemec.
- Establish surface preparation requirements.
- Ensure all equipment is readily available and in working order.
- Set-up a mixing area clearly designated at least 50 feet (15.2 meters) away from heat, sparks, open flames, welding, or other sources of ignition.
- Communicate the installation, safety procedures, and requirements with all persons involved.



*Flexible Base Coat Option: Series 206SC may be substituted for Series 239SC when building the base coat.

4.0 EQUIPMENT

4.1 SURFACE PREPARATION

- Personal Protective Equipment
- Wet-or Dry-abrasive blasting equipment or Waterjetting equipment
- Diamond grinder

4.2 MIXING

- Volume measure for Part A and B
- 5 gallon empty pails for mixing
- M-B19 "H-Style" box blade mixing paddle
- PS "Jiffy" mixing paddle (liquids only)
- 3/4 inch (19 mm) 10 amp drill

4.3 APPLICATION

- Scissors or shears for cutting fiberglass mat
- Concrete finishing trowel
- 3/8 inch to 1/2 inch (9.5 to 12.7 mm) nap, shed resistant roller cover for priming and saturating glass
- 1/8 inch (3.2 mm) rib roller
- Brushes, rollers or spray equipment for applying topcoat

5.0 CONCRETE SURFACE PREPARATION

All new concrete should be allowed to cure 28 days. Verify dryness by testing for moisture with a "plastic film tape-down test" (reference ASTM D 4263). If necessary for testing horizontal surfaces, perform "Standard Test Method for Measure Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (reference ASTM F 1869). Moisture content is not to exceed three pounds per 1,000 sq.ft. in a 24 hour period. Abrasive blast or equivalent to remove laitance, form release agents, curing compounds, sealers and other contaminants to provide profile per SSPC-SP13/NACE No. 6, ICRI-CSP-5. Blasting must be performed sufficiently close to the surface to open up surface voids, bug holes, air pockets and other subsurface irregularities. Dry, oil-free air must be used for the blasting operation (reference ASTM D 4285).

Large voids and other cavities should be filled with the recommended filler or surfacer (Series 215 Surfacing Epoxy, Series 217 MortarCrete or Series N218 MortarClad). Refer to the appropriate data sheet for specific recommendations.

All dust and blasting debris dust shall be removed by vacuuming or washing prior to application. Cloths shall not be permitted for cleaning blasted surfaces because of possible lint contamination. Brushing or blowing the surface shall not be permitted, as these methods will not dislodge all particles embedded in the surface profile. All surfaces must be clean, dry, free of oil, grease and other contaminants.

5.1 OUTGASSING

Outgassing must always be considered a possibility with any concrete substrate. A number of means exist to either eliminate or reduce outgassing. First, application should be accomplished out of direct sunlight and during times when the surface temperature of the concrete is stable or descending. In addition, coating systems may have an exothermic reaction during their cure generating heat on the concrete surface promoting outgassing. The use of primers or resurfacers can help reduce outgassing.

5.2 EXPOSED REBAR

When rebar is exposed through the surface preparation or due to construction oversights, the rebar must be properly cleaned and primed. Exposed rebar must be cleaned as per SSPC-SP10 / NACE No. 2 "Near-White Metal Blast Cleaning" and primed using an epoxy primer such as Tnemec Series N69 Hi-Build Epoxoline II or equal. The area around the rebar may then be rebuilt using Series 215 Surfacing Epoxy or Series N218 MortarClad, or in more extreme cases, Series 217 MortarCrete.

5.3 TERMINATIONS

When the coating system is not scheduled to provide a monolithic surface, terminations must be built into the system. For example, when the system is scheduled to terminate three feet up the wall, saw cuts must be installed so the system may be keyed into these termination points. Refer to the "Secondary Containment Construction Details Guide" for more information.

5.4 PREPARATION OF CMU

Allow new mortar to cure 28 days. Surfaces must be clean, dry, sound and free of all contaminants (Ref. SSPC-SP13/NACE No. 6). Level all protrusions and mortar spatter.

6.0 PRIMER INSTALLATION

6.1 SERIES 201 EPOXOPRIME

The primer for the Series 239SC/282 mat reinforced mortar system is Series 201 Epoxoprime, a moisture-tolerant, modified polyamine epoxy.

6.2 SERIES 201 STORAGE TEMPERATURE

Store at a minimum of 40°F (4°C) and a maximum of 90°F (32°C). **Note:** Material should be stored at temperatures between 70°F and 90°F (21°C and 32°C) for at least 48 hours prior to use.

6.3 SERIES 201 SURFACE TEMPERATURE

Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point. To avoid outgassing, concrete temperature should be stabilized or in a descending temperature mode. Material should not be applied in direct sunlight.

6.4 SERIES 201 MATERIAL TEMPERATURE

For optimum application, handling and performance the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

6.5 SERIES 201 POT LIFE

The pot life is 25 to 30 minutes at 75°F (24°C). Material temperatures above 90°F (32°C) will significantly reduce the pot life.

6.6 SERIES 201 PACKAGING

	PART A	PART B	YIELD (MIXED)
Extra Large Kit	2-55 gallon drums	1-55 gallon drum	165 gallons (624.5 L)
Large Kit	2-5 gallon pails	1-5 gallon pail	15 gallons (56.8 L)
Small Kit	2-1 gallon cans	1-1 gallon can	3 gallons (11.4 L)

6.7 SERIES 201 COVERAGE RATES

	DRY MILS (MICRONS)	WET MILS (MICRONS)	SQ. FT./GAL (M ² /GAL)
Horizontal	6.0-12.0 (150-305)	6.0-12.0 (150-305)	134-267 (12.2-24.8)
Vertical	4.0-6.0 (100-150)	4.0-6.0 (100-150)	267-401 (24.8-37.3)

Allow for overspray and surface irregularities and waste. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

6.8 SERIES 201 MIXING

Use a variable speed drill with a PS Jiffy blade. Slowly mix two parts A component, and while under agitation add one part B component and mix for a minimum of two minutes. Ensure that all Part B is blended with Part A by scraping the pail walls with a flexible spatula. **Note:** A large volume of material will set up quickly if not applied or reduced in volume. **Caution: Do not reseat mixed material. An explosion hazard may be created.**

6.9 SERIES 201 APPLICATION

Roller Application:

Use high quality 3/8 inch to 1/2 inch (9.5 to 12.7 mm) woven nap, shed resistant, roller cover.

Brush Application:

Use high quality synthetic or nylon bristle brush.

Horizontal Application:

Squeegee and backroll. Brush small areas only.

Vertical Application:

Roller apply or spray and backroll. Brush small areas only. Spray application equipment includes a Graco "King" 45:1 or 60:1 airless spray pump or other airless spray equipment of equal or greater configuration and capability. Pump assembly should include a moisture trap and oiler, air regulator with gauge and fluid outlet drain valve. When spraying, a high pressure manifold and 60 mesh filter is recommended. Use a 3/8 inch to 1/2 inch (9.5 to 12.7 mm) I.D. material hose (4,000 to 5,000 psi (275 to 344 bar) working pressure rating). A Graco silver gun or equivalent may be used. The preferred tips with orifices ranging from 0.019 inch to 0.033 inch (485 to 840 microns) should be mounted in a Graco H.D. RAC Housing/Guard assembly. The suggested operating air pressure is 80 to 90 psi (5.5 to 6.2 bar). **Spraying should be considered as a means to transfer the material to the surface and should be followed by backrolling.**

7.0 BASECOAT APPLICATION

7.1 SERIES 239SC CHEMBLOC (MORTAR)

The trowel-applied mortar base coat for the Series 239SC/282 mat reinforced mortar system is Series 239SC ChemBloc (mortar), a modified novolac polyamine epoxy

7.2 SERIES 239SC STORAGE TEMPERATURE

Store at a minimum of 50°F (10°C) and a maximum of 90°F (32°C). **Note:** Material should be stored at temperatures between 70°F and

90°F (21°C and 32°C) for at least 48 hours prior to use.

7.3 SERIES 239SC SURFACE TEMPERATURE

Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point. To avoid outgassing, concrete temperature should be stabilized or in a descending temperature mode. Material should not be applied in direct sunlight.

7.4 SERIES 239SC MATERIAL TEMPERATURE

For optimum application, handling and performance the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

7.5 SERIES 239SC POT LIFE

The pot life is 30 to 35 minutes at 75°F (24°C). Increasing material temperatures will significantly reduce the pot life

7.6 SERIES 239SC PACKAGING

	PART A	PART B	PART C	YIELD (MIXED)
MCK	1-1 gallon can	1-1/2 gallon can	1-29 lb bag	2.8 gallons (10.6 L)

7.7 SERIES 239SC COVERAGE RATES

	DRY MILS (MICRONS)	WET MILS (MICRONS)	SQ. FT/GAL (M ² /GAL)
Mortar/MCK †	60.0-80.0 (1525-2030)	60.0-80.0 (1525-2030)	56-76 (5.3-7.0)

† Coverage rates are based on the addition of the entire Part C filler. **Note:** Coverage rates will vary depending on vertical or horizontal applications

7.8 SERIES 239SC MIXING

Mix entire kits of all products as supplied. Use a variable speed drill with a M-B19 “H style” box blade. Fully blend the Part A and Part B components for one full minute using the prescribed equipment before adding the Part C. Once the Parts A and B are fully mixed, gradually add the Part C filler to the liquid while under agitation and blend until a uniform consistency is achieved (typically two to three minutes). During the mixing process, scrape the sides and bottom of the container to ensure all of Parts A, B, and C are blended together. The material is then ready for application. **Note:** For filled basecoat slurry, the Part C filler can be reduced by approximately 8 lbs. (3.6 kg) or 25%.

7.9 SERIES 239SC APPLICATION

Vertical Applications:

The base coat mortar should be applied with a trowel at approximately 1/16 inch (1.6 mm) thick (60 to 80 mils (1525 to 2030 microns) DFT) while the prime coat is still tacky. Care should be taken to prevent sagging when applying above this recommended thickness. The entire amount of Part C (29 lbs (13.2 kg)) is recommended per mixed 1-1/2 gallons of Series 239SC. In hot weather, apply basecoat in small areas due to limited working time. When possible, shade areas or utilize natural conditions such as areas not in direct sunlight.

Horizontal Applications:

For horizontal surfaces, 60 to 80 mils (1525 to 2030 microns) DFT should be applied as a mortar or slurry. For mortar applications, the entire amount of Part C (29 lbs (13.2 kg)) is recommended per mixed 1-1/2 gallons of Series 239SC. The amount of Part C recommended for slurry applications is 22 lbs (9.9 kg). This is achieved by reducing the Part C filler by 8 lbs (3.6 kg) or 25%.

Cove Applications:

All corners where the fiberglass mat is to be installed shall receive a minimum 1 inch cant cove created with stiffened mortar mix or fumed silica applied to a margin trowel or a 3 inch hand trowel to provide a smooth transition of the mat placement without breaking the fibers.

7.10 FIBERGLASS REINFORCEMENT INSTALLATION

Measure the length desired (equal to the area to be base coated). This area will vary with application rate. The glass is best cut with scissors. Roll up the cut piece of mat tightly for easier handling.

While the base coat mortar is still wet, lay and press the fiberglass reinforcing mat into the surface. Using a rib roller, backroll fiberglass to remove any air pockets. Once mat is placed, immediately saturate mat with Series 239SC saturant coat until fiberglass mat is completely wet out. It is necessary to be especially careful to press the mat firmly into corners. The typical fiberglass mat is Series 211-215 unless otherwise specified. Contact your Tnemec representative for more information.

8.0 FLEXIBLE BASECOAT (OPTIONAL)

8.1 FLEXIBLE BASE COAT

When a flexible, crack bridging base coat is required, Series 206SC ChemBloc resin may be substituted for Series 239SC ChemBloc resin when building the base coat mortar.

8.2 SERIES 206SC CHEMBLOC (MORTAR)

Series 206SC ChemBloc is a glass-reinforced, modified flexible polyamine epoxy mortar

8.3 SERIES 206SC STORAGE TEMPERATURE

Store at a minimum of 50°F (10°C) and a maximum of 90°F (32°C). **Note:** Material should be stored at temperatures between 70°F and 90°F (21°C and 32°C) for at least 48 hours prior to use.

8.4 SERIES 206SC SURFACE TEMPERATURE

Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point. To avoid outgassing, concrete temperature should be stabilized or in a descending temperature mode. Material should not be applied in direct sunlight.

8.5 SERIES 206SC MATERIAL TEMPERATURE

For optimum application, handling and performance the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

8.6 SERIES 206SC POT LIFE

The pot life is 30 to 40 minutes at 75°F (24°C). Increasing material temperatures will significantly reduce the pot life

8.7 SERIES 206SC PACKAGING

	PART A	PART B	PART C	YIELD (MIXED)
MCK	1-1 gallon can	1-1/2 gallon can	1-29 lb bag	2.8 gallons (10.6 L)

8.8 SERIES 206SC COVERAGE RATES

	DRY MILS (MICRONS)	WET MILS (MICRONS)	SQ. FT./GAL (M ² /GAL)
Mortar/MCK †	60.0-80.0 (1525-2030)	60.0-80.0 (1525-2030)	56-76 (5.3-7.0)

† Coverage rates are based on the addition of the entire Part C filler. **Note:** Coverage rates will vary depending on vertical or horizontal applications

8.9 SERIES 206SC MIXING

Mix entire kits of all products as supplied. Use a variable speed drill with a box blade. Fully blend the Part A and Part B components for two minutes using the prescribed equipment before adding the Part C. Once the Parts A and B are fully mixed, gradually add the Part C filler to the liquid while under agitation and blend until a uniform consistency is achieved (typically two to three minutes). During the mixing process, scrape the sides and bottom of the container to ensure all of Parts A, B, and C are blended together. The material is then ready for application. **Note:** For filled base coat slurry, the Part C filler can be reduced by approximately 6 lbs (2.7 kg) or 20%. **Note:** A large volume of material will set up quickly if not applied or reduced in volume. **Caution: Do not reseal mixed material. An explosion hazard may be created.**

8.10 SERIES 206SC APPLICATION

Vertical Applications:

The base coat mortar should be applied with a trowel at approximately 1/16 inch (1.6 mm) thick (60 to 80 mils (1525 to 2030 microns) DFT) while the prime coat is still tacky. Care should be taken to prevent sagging when applying above this recommended thickness. The entire amount of Part C (29 lbs (13.2 kg)) is recommended per mixed 1-1/2 gallons of Series 206SC. In hot weather, apply basecoat in small areas due to limited working time. When possible, shade areas or utilize natural conditions such as areas not in direct sunlight.

Horizontal Applications:

For horizontal surfaces, 60 to 80 mils (1525 to 2030 microns) DFT should be applied as a mortar or slurry. For mortar applications, the entire amount of Part C (29 lbs (13.2 kg)) is recommended per mixed 1-1/2 gallons of Series 206SC. The amount of Part C recommended for slurry applications is 24 lbs (10.9 kg). This is achieved by reducing the Part C filler by 8 lbs (3.6 kg) or 25%.

8.11 FIBERGLASS REINFORCEMENT INSTALLATION

Measure the length desired (equal to the area to be base coated). This area will vary with application rate. The glass is best cut with scissors. Roll up the cut piece of mat tightly for easier handling.

While the base coat mortar is still wet, lay and press the fiberglass reinforcing mat into the surface. Using a rib roller, backroll fiberglass

to remove any air pockets. Once mat is placed, immediately saturate mat with Series 206SC saturant coat until fiberglass mat is completely wet out. It is necessary to be especially careful to press the mat firmly into corners.

9.0 SATURANT COAT INSTALLATION

9.1 SERIES 239SC CHEMBLOC (LIQUIDS)

The saturant coat for the Series 239SC/282 mat reinforced mortar system is Series 239SC ChemBloc (liquids).

9.2 SERIES 239SC CHEMBLOC (LIQUIDS) PACKAGING

	PART A	PART B	YIELD (MIXED)
RCK	1-1 gallon can	1-1/2 gallon can	1.5 gallons (5.7 L)

9.3 SERIES 239SC CHEMBLOC (LIQUIDS) COVERAGE RATES

	DRY MILS (MICRONS)	WET MILS (MICRONS)	SQ. FT./GAL (M ² /GAL)
Saturant Coat (RCK) ††	16.0-24.0 (405-610)	16.0-24.0 (405-610)	100-150 (9.3-14.0)

†† Based on Series 211-215 3/4 oz. Chopped Strand Mat. **Note:** Coverage rates for the saturant coat may vary depending on the weight of the mat selected as the mat must be fully saturated. Contact Tnemec Technical Services for additional information.

9.4 SERIES 239SC CHEMBLOC (LIQUIDS) MIXING

Use a variable speed drill with a PS Jiffy blade. Slowly mix Part A component, and while under agitation add Part B component and mix for a minimum of two minutes. Ensure that all Part B is blended with Part A by scraping the pail walls with a flexible spatula.

9.5 SERIES 239SC CHEMBLOC (LIQUIDS) APPLICATION

Saturating:

It is recommended that the saturant coat be applied while the base coat underneath is still wet.

The saturating resin is best applied with a short nap roller and large brush in areas where necessary. Material may be thinned up to 10% with No. 2 thinner to facilitate better roller application over the fiberglass mat.

At overlaps the top layer of mat should be lifted so saturating resin can be applied to the bottom layer. The top layer is then pressed onto the bottom layer and saturated. Use enough saturant to “wet out” the mat, but do not allow the saturant to puddle or run. Saturation is complete when the glass mat has lost its dry white appearance and becomes translucent.

A 1/8” ribbed roller should be utilized to force out any entrapped air or wrinkles. While the saturant is still wet, an aggregate may be broadcast into the horizontal surface for enhanced slip resistance.

Once cured, the remaining, un-adhered aggregate must be swept or vacuumed up before topcoating. **Note:** Once saturant has cured hard and, if an aggregate has not been incorporated into the surface, the glass should be inspected for any imperfections. Grind down any mortar fins or glass spurs. Any voids found underneath the glass should be ground down and patched before topcoating. Refer to Tech Bulletin 98-11 for more information.

10.0 TOPCOAT INSTALLATION

10.1 SERIES 282 TNAME-GLAZE

The topcoat/sealer for the Series 239SC/282 mat reinforced mortar system is Series 282 Tname-Glaze, a modified polyamine epoxy.

Note: Two coats of Series 282 may be required for hide and to enhance performance.

10.2 SERIES 282 STORAGE TEMPERATURE

Store at a minimum of 40°F (4°C) and a maximum of 90°F (32°C).

Note: Material should be stored at temperatures between 70°F and 90°F (21°C and 32°C) for at least 48 hours prior to use.

10.3 SERIES 282 SURFACE TEMPERATURE

Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point. To avoid outgassing, concrete temperature should be stabilized or in a descending temperature mode. Material should not be applied in direct sunlight.

10.4 SERIES 282 MATERIAL TEMPERATURE

For optimum application, handling and performance the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

10.5 SERIES 282 POT LIFE

The pot life is 25 to 30 minutes at 75°F (24°C), 15 to 20 minutes at 80°F (27°C), and 8 to 10 minutes at 90°F (32°C). Material temperatures above 90°F (32°C) will significantly reduce the pot life.

10.6 SERIES 282 PACKAGING

	PART A	PART B	YIELD (MIXED)
Large Kit	5 gallon pails	5 gallon pail	10 gallons (37.9 L)
Small Kit	1 gallon cans	1 gallon pail	2 gallons (7.57 L)

10.7 SERIES 282 COVERAGE RATES

	DRY MILS (MICRONS)	WET MILS (MICRONS)	SQ. FT/GAL (M ² /GAL)
Horizontal	6.0-12.0 (150-305)	6.0-12.0 (150-305)	134-267 (12.4-24.8)
Vertical	4.0-8.0 (100-205)	4.0-8.0 (100-205)	200-401 (18.6-37.3)

Allow for overspray, surface irregularities and waste. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

10.8 SERIES 282 MIXING

Use a variable speed drill with a PS Jiffy blade. Slowly mix Part A component, and while under agitation add Part B component and mix for a minimum of two minutes. Ensure that all Part B is blended with Part A by scraping the pail walls with a flexible spatula. **Note:** A large volume of material will set up quickly if not applied or reduced in volume. **Caution: Do not reseal mixed material. An explosion hazard may be created.**

10.9 SERIES 282 APPLICATION

Roller Application:

Use high quality 3/8 inch to 1/2 inch (9.5 to 12.7 mm) shed resistant, synthetic woven nap roller cover.

Brush Application:

Use high quality synthetic or nylon bristle brush.

Horizontal Application:

Squeegee and backroll. Brush small areas only.

Vertical Application:

Roller apply or spray and backroll. Brush small areas only. Spray application equipment includes a Graco "King" 45:1 or 60:1 airless spray pump or other airless spray equipment of equal or greater configuration and capability. Pump assembly should include a moisture trap and oiler, air regulator with gauge and fluid outlet drain valve. When spraying, a high pressure manifold and 60 mesh filter is recommended. Use a 3/8 inch to 1/2 inch (9.5 to 12.7 mm) I.D. material hose (4,000-5,000 psi (274 to 344 bar) working pressure rating). A Graco silver gun or equivalent may be used. The preferred tips with orifices ranging from 0.019" to 0.033" (485 to 840 microns) should be mounted in a Graco H.D. RAC Housing/Guard assembly. The suggested operating air pressure is 80 to 90 psi (5.5 to 6.2 bar).

Spraying should be considered as a means to transfer the material to the surface and should be followed by backrolling.

11.0 UV-RESISTANT URETHANE TOPCOAT

(OPTIONAL)

An optional UV-resistant topcoat of Series V290 CRU can be applied to the system to prevent sunlight degradation of Series 282. Series V290 may not withstand chemical exposures and should be considered a "sacrificial" coating. Periodic maintenance should be performed to reestablish any chemically attacked coating.

12.0 INSPECTION

Examine the application for any air bubbles or blisters. If present, they must be cut out and repaired. Refer to Tnemec Technical Bulletin 98-11 for additional information.

High voltage discontinuity (spark) testing may be used to determine the presence and number of discontinuities in the nonconductive Series 282 Tname-Glaze applied to a conductive surface.

All high voltage discontinuity (spark) testing shall be performed in accordance with NACE SP0188 and the procedures outlined herein.

Coatings shall be applied and allowed to cure within the parameters of the corresponding Product Data Sheets. Sufficient curing time of the coating system shall be allowed prior to conducting a holiday test, as indicated by the "To Place in Service" duration on the Product Data Sheets. Curing time will vary with surface temperature, air movement, humidity, and film thickness.

If the substrate is incompatible or if thickness constraints are not applicable for a non-destructive dry film thickness gauge,

measurements of the coating system thickness are to be performed during application of each system component using a wet film gauge, feeler gauge, or other measurement device that can accurately measure the coating wet film thickness. These coating measurements are to be tabulated to determine the total system thickness.

All high voltage discontinuity (spark) testing shall be performed using a Tinker & Rasor model AP/W Holiday Detector. Refer to the following chart for appropriate voltage based on coating system thickness.

To perform holiday testing attach a ground wire from the instrument ground output terminal to the conductive substrate and ensure proper electrical contact. Test conductivity by attaching the instrument ground wire to rebar or other metallic ground permanently installed in the concrete and touch the electrode to the bare concrete. If metallic ground is not visible, the ground wire can be placed directly against a bare concrete surface and weighted with a damp cloth and sand-filled paper bag. Make contact with the exploring electrode on the conductive substrate to verify the instrument is properly grounded. If the test proves negative, determining discontinuities with a high voltage spark test will be ineffective. Under no circumstances shall the voltage be increased above the recommended voltage potential.

11.1 RECOMMENDED VOLTAGES FOR HIGH VOLTAGE SPARK TESTING WITH TINKER & RASOR MODEL AP/W

TOTAL DRY FILM THICKNESS (MILS)	VOLTAGE (V)
20-24	2,500
25-29	3,000
30-39	3,500
40-47	5,000
48-59	6,000
60-69	7,500
70-79	8,500
80-99	10,000
100-124	12,500
125-134	15,000
135-159	16,000
160-174	17,500
175-214	20,000
215-269	27,000
270-299	31,000
300-350	35,000

Holiday testing of repaired areas should be performed using the same testing procedures as outlined above.

If utilizing alternate high voltage DC holiday detectors, never exceed the recommended 100-125 volts DC per mil or contact Tnemec Technical Services for recommended voltage settings. Excessive voltage may produce a holiday in the coating film.

13.0 REPAIR

For patching and repairing small areas, less than one sq. ft., grind affected area and reapply as per initial instructions. Overlap 1 inch to 2 inches (25.4 to 50.8 mm) onto the existing material and square off with masking tape. Make sure areas for overlap are scarified and feathered. Small repairs may be completed by adding fumed silica to Series 239SC.

14.0 CURING

Allow 24 hours final cure before placing into service. Contact Tnemec Technical Service if deviations are required.

15.0 CLEANUP

Clean all equipment immediately after use with a compatible solvent such as Xylene or Methyl Ethyl Ketone (MEK). Hands can be cleaned with soap and water.

16.0 STORAGE & HANDLING

All materials must be stored between 40°F (10°C) and 90°F (32°C). Prior to application, the material must be between 70°F and 90°F (21°C and 32°C) for at least 48 hours. For optimum application, handling and performance, the surface, air and material temperatures during application should be between 70°F and 90°F (21°C and 32°C). For applications below 70°F (21°C), contact your Tnemec representative for instructions and precautions. The surface and air temperature should be at least 5°F (3°C) above the dew point and the relative humidity should be below 75% with soap and water.

17.0 SAFETY

These products may contain solvents and/or other chemical ingredients. Adequate health and safety precautions should be observed during storage, handling, application and curing. For information regarding the potential hazards associated with these products, please refer to the container label or request a Safety Data Sheet from Tnemec Company, Inc. at +1-816-483-3400 or www.tnemec.com.