



SURFACE PREPARATION AND APPLICATION GUIDE

SERIES 215ML/22
MAT-REINFORCED EPOXY LINING SYSTEM

TNEMEC COMPANY INCORPORATED

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. 10/2015

TABLE OF CONTENTS

Introduction.....	1
Product Overview.....	1
Job Set-Up.....	1
Equipment Overview.....	1
Surface Preparation.....	1-2
Primer Installation.....	2
Basecoat Installation.....	3
Fiberglass Mat Installation.....	3
Saturant Coat Installation.....	3-4
Topcoat Installation.....	4
Inspection.....	4-5
Repair.....	5
Final Curing Times.....	5
Safety.....	5
Maintenance.....	5

INNOVATION IN EVERY COAT.™

1.0 INTRODUCTION

The purpose of this guide is to acquaint applicators with the basic information necessary for properly ordering, storing and installing Tnemec's Series 215ML/22 Mat-Reinforced Epoxy Lining System. Prior to starting work, please read this entire guide carefully. If you have questions, contact your Tnemec representative or call 1-800-TNEMEC1. It is important that you obtain answers to any questions before work begins.

Please reference the project specifications and compare them with this guide and the product data sheet. Resolve any inconsistencies prior to starting work.

This application guide cannot cover every issue that may be encountered in the field. If issues arise that are not addressed in this guide or the product data sheet, please contact your Tnemec representative or call 1-800-TNEMEC1 for assistance.

2.0 PRODUCT OVERVIEW

The following contains information on the core components of this product.

2.1 SERIES 215ML/22 SYSTEM

Series 215ML/22 is a nominal 125 mil trowel-applied, fiberglass mat reinforced, 100% solids polyamine epoxy lining system for potable and non-potable ultrafiltration membrane process, backwash, neutralization basins and other concrete structures. The entire lining system is certified by NSF/ANSI Standard 61 for potable water contact.

2.2 SYSTEM OVERVIEW

Primer

Series L/N/V 140F Pota-Pox® Plus
3-6 Mils DFT

Bedding Coat

Series 215ML Surfacing Epoxy
60-80 Mils DFT

Reinforcement

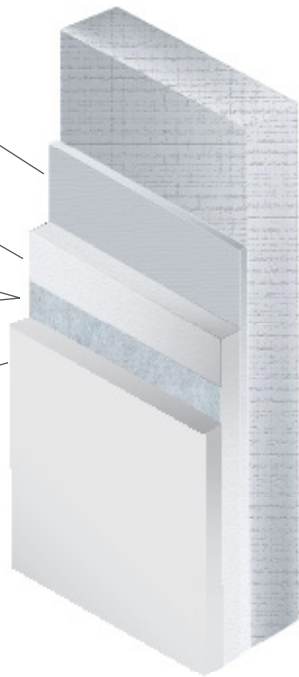
Series 211-215 Fiberglass Mat

Saturant Coat

Series 22 Epoxoline
40-50 sq. ft/gal

Topcoat

Series 22 Epoxoline
20-30 Mils DFT



3.0 JOB SET-UP

Prior to starting installation, please 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 away

from heat, sparks, open flame, welding, or other sources of ignition.

- Communicate the installation, safety procedures, and requirements with all persons involved.

4.0 EQUIPMENT OVERVIEW

4.1 SURFACE PREPARATION EQUIPMENT

- Personal Protective Equipment
- Wet-or Dry-abrasive blasting equipment or Waterjetting equipment.

4.2 MIXING EQUIPMENT

- 5 gallon empty pails for mixing.
- M-B19 "H-Style" box blade mixing paddle for Series 215ML.
- PS "Jiffy" mixing paddle for Series L/N/V 140F and 22.
- 3/4", 10 amp drill.

4.3 APPLICATION EQUIPMENT

- Scissors or shears for cutting fiberglass mat (Series 211-215)
- Concrete finishing trowel.
- 3/8"-1/2" nap, shed resistant roller cover for priming and saturating the fiberglass.
- 1/8" rib roller.
- Rollers or spray equipment for applying saturant and topcoat. (Series 22)

5.0 SURFACE PREPARATION

5.1 PREPARATION OF CONCRETE

Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness by testing for moisture in accordance with one or more of the following:

- ASTM D 4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" - no visible moisture.
- ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" - maximum 3 lbs per 1,000 sq. ft. in a 24 hour period.
- ASTM F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" - maximum 80% relative humidity.

Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide an ICRI-CSP 5 surface profile.

5.2 REINFORCING STEEL REPAIR

Where corrosion of the reinforcement steel (rebar) exists, continue concrete removal along the corroded steel and any adjacent areas which show evidence of corrosion-induced damage that would inhibit bonding of repair material. When the exposed reinforcing

steel has loose rust, corrosion products, or is not well bonded to the surrounding concrete, removal should include undercutting the corroded reinforcing steel by approximately 3/4 in (19 mm) in accordance with ICRI Guideline No. 310.1R. Every precaution should be made to avoid cutting underlying reinforcement. All exposed steel reinforcement surfaces shall be thoroughly cleaned of all loose concrete, rust, and other contaminants. A protective coating such as Series 1 or N140 can be applied to the steel reinforcement after surface preparation. Avoid spillage or application onto the parent concrete. The area around the rebar may then be rebuilt using Series 218 MortarClad, or in more extreme cases, Series 217 MortarCrete.

5.3 MISCELLANEOUS METALS

Any miscellaneous metals or pipe penetrations scheduled to receive the coating system should be properly prepared in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast Cleaning or SSPC-SP16 Brush-off Blast Cleaning of Non-Ferrous Metals, minimum 3.0 mils angular anchor profile.

5.4 TERMINATIONS

When the coating system is not scheduled to provide a monolithic surface, terminations must be built into the system. Examples include leading-edge sawcut terminations or overlapping onto pipes or other miscellaneous metals. Consult your Tnemec Representative for more information.

6.0 PRIMER INSTALLATION

6.1 SERIES L/N/V 140F POTA-POX PLUS

The recommended primer for the Series 215ML/22 mat reinforced lining system is Series L/N/V 140F Pota-Pox Plus, a polyamidoamine epoxy, thinned up to 10% with Tnemec's No. 4 thinner. Contact Tnemec Technical Services for the use of alternate primers.

6.2 SERIES L/N/V 140F CURING TIME

TEMPERATURE	TO TOUCH/TO HANDLE	MIN. RECOAT	MAX. RECOAT
75°F (24°C)	4 Hours	5 Hours	7 Days
65°F (18°C)	7-8 Hours	9-11 Hours	7 Days
55°F (13°C)	12-14 Hours	16-20 Hours	7 Days
45°F (7°C)	18-22 Hours	28-32 Hours	7 Days
35°F (2°C)	28-32 Hours	46-50 Hours	7 Days

Curing time varies with surface temperature, air movement, humidity and film thickness. **Ventilation:** When used in enclosed areas, provide adequate ventilation during application and cure. **Note:** Refer to product listings on www.nsf.org for specific potable water return to service information.

6.3 SERIES L/N/V 140F PACKAGING

KIT SIZE	PART A	PART B	YIELD (Mixed)
Large	5 gallon pail	5 gallon pail	10 gallons (37.8 L)
Small	1 gallon can	1 gallon can	2 gallons (7.57 L)

6.4 SERIES L/N/V 140F COVERAGE RATES

DRY MILS (MICRONS)	SQ. FT./GAL COVERAGE RATE (M ² /GAL)
3.0-6.0 (76-150)	358-179 (33-17)

6.5 SERIES L/N/V 140F MIXING

Start with equal amounts of both Parts A and B. Using a power mixer, separately mix Parts A and B. Add Part A to Part B under agitation, stir until thoroughly mixed. Both components should be above 50°F (10°C) prior to mixing. For application to surfaces between 35°F to 50°F (2°C to 10°C), allow mixed material to stand thirty (30) minutes and restir before using. For optimum application properties, blended components should be above 40°F (4°C).

6.6 SERIES L/N/V 140F THINNING

For Series L140F, thin up to 5% or 6.4 oz (190 mL) per gallon with No. 49 Thinner. For Series N140F, thin up to 10% or 13 oz (380 mL) per gallon with No. 4 Thinner. For Series V140F, thin up to 4.5% or 5.7 oz (148 mL) per gallon with No. 4 Thinner. **Caution:** Series N/V 140F NSF certification is based on thinning with No. 4. Use of any other thinner voids NSF/ANSI Std. 61 certification.

6.7 SERIES L/N/V 140F SPRAY LIFE & POT LIFE

TEMPERATURE	SPRAY LIFE	POT LIFE
100°F (38°C)	-	30 Minutes
75°F (24°C)	30 Minutes	1 Hour
50°F (10°C)	-	2 Hours

Note: Spray application after listed times will adversely affect ability to achieve recommended dry film thickness.

6.8 SERIES L/N/V 140F MATERIAL & STORAGE TEMPERATURE

Minimum storage temperature is 20°F (-7°C) and maximum is 110°F (43°C). Prior to application, the material temperature should be above 60°F (16°C). It is suggested the material be stored at this temperature at least 48 hours prior to use.

Temperatures will affect workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

6.9 SERIES L/N/V 140F EQUIPMENT

Roller: Use 3/8" or 1/2" (9.5 mm to 12.7 mm) synthetic woven nap roller cover. Use longer nap to obtain penetration on rough or porous surfaces.

Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes.

6.10 SERIES L/N/V 140F SURFACE TEMPERATURE

Minimum surface temperature is 35°F (2°C) and maximum is 135°F (57°C). The surface should be dry and at least 5°F (3°C) above the dew point. Coating will not cure below the minimum surface temperature.

6.11 SERIES L/N/V 140F CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner or MEK.

7.0 BASE COAT INSTALLATION

7.1 SERIES 215ML SURFACING EPOXY

The trowel-applied base coat (bedcoat) for the Series 215ML/22 mat reinforced lining system is Series 215ML Surfacing Epoxy, a modified polyamine epoxy.

Fill voids, bugholes and other surface irregularities with Series 215ML scratch coat. Apply Series 215ML chamfer to all corners using a margin or rolled-radius trowel. Apply a base coat of Series 215ML at 60 to 80 mils (1,524 to 2,032 microns) to the entire surface. Immediately lay and press Series 211-215 Fiberglass Mat (Section 8.0).

7.2 SERIES 215ML CURING TIME

TEMPERATURE	TO TOUCH	DRY THROUGH	MAXIMUM RECOAT‡
95°F (35°C)	4 Hours	12 Hours	14 Days
75°F (24°C)	10 Hours	24 Hours	21 Days
55°F (13°C)	18 Hours	48 Hours	21 Days
45°F (7°C)	24 Hours	72 Hours	21 Days
35°F (2°C)	32 Hours	96 Hours	21 Days

‡ **Note:** If the Series 215ML surface is exterior exposed for more than 7 days, scarification is required before topcoating.

7.3 SERIES 215ML PACKAGING

KIT SIZE	PART A Liquid	PART B Liquid	YIELD (Mixed)
Large	3 gallon pail (partial fill)	5 gallon pail (partial fill)	4 gallons (15 L)
Small	1 gallon can	3 gallon pail (partial fill)	2 gallons (7.5 L)
Touch-Up	1 quart can	1 quart can	1/2 gallon (1.89 L)

7.4 SERIES 215ML COVERAGE RATES

WET MILS (MICRONS)	DRY MILS (MICRONS)	SQ. FT./GAL COVERAGE RATE (M ² /GAL)
60.0 - 80.0 (1524 - 2032)	60.0 - 80.0 (1524 - 2032)	27 - 20 (2.5 - 1.9)

7.5 SERIES 215ML MIXING

Mix the entire contents of Part A and Part B separately. Scrape all of the Part A material from the pail and into the Part B container by using a flexible spatula. Use a variable speed drill with a PS Jiffy blade and mix the blended components for a minimum of two minutes. Apply the mixed material within the pot life limits after agitation. **Note:** Tnemec Series 211-0211 fumed silica may be added at 0.75:1 by volume per mixed gallon where a thicker consistency is required to achieve the desired application and film build properties. Mix with Part A as directed in Mixing Instructions. Multiple lifts may be required. A large volume of material will gel quickly if not applied or reduced by volume. **Caution:** Do not reseal mixed material. An explosion hazard may be created.

7.6 SERIES 215ML THINNING

Do not thin.

7.7 SERIES 215ML POT LIFE

90°F (32°C)	25 Minutes
70°F (21°C)	45 Minutes

Material temperatures above 90°F (32°C) will significantly reduce the pot life.

7.8 SERIES 215ML MATERIAL & STORAGE TEMPERATURE

Minimum storage temperature is 20°F (-6°C) and maximum is 110°F (43°C). Prior to application, the material temperature should be between 70°F and 80°F (21°C and 27°C). It is suggested the material be stored at this temperature at least 48 hours prior to use. Temperatures will affect workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

7.9 SERIES 215ML APPLICATION EQUIPMENT

Mortar hawk, trowels, broad knives and rubber floats are recommended. Series 215ML can also be spray transferred followed by troweling.

Airless Spray Equipment

Pump	WIWA 410 9:1 Ratio	Graco 45:1, 56:1, X50, X60	Graco M680 10:1 Ratio	Graco M680 10:1 Ratio
Fluid Line	25' 1" Diameter 10' 3/4" Diameter	3/8" to 1/2" I.D.	25' 1" Diameter 10' 3/4" Diameter	25' 1" Diameter 10' 3/4" Diameter
Spray Gun	WIWA Pole Gun	XTR-7	Flex Hose	HTX
Fluid Tips	1/4" to 3/8"	0.031"-0.041"	No. 5 Nozzle	4C Fine Finish
Fluid Pressure	180 to 360 psi (Adjust as necessary)	3500-4500 psi	200 psi (Adjust as necessary)	250 psi (Adjust as necessary)
Atomizing Pressure	Adjust at gun for proper atomization	N/A	Adjust at gun for proper atomization	Adjust at gun for proper atomization
Hopper	6.5 Gallons Stainless Steel	6.5 Gallons Stainless Steel	10 Gallons Stainless Steel	10 Gallons Stainless Steel

Refer to the operation manual for application instructions. Air requirements 80 CFM at 100 psi. **Atomization air must be dry, the use of an after cooler is recommended.**

7.10 SERIES 215ML SURFACE TEMPERATURE

Minimum surface temperature is 35°F (2°C) and maximum is 130°F (54°C). The surface should be dry and at least 5°F (3°C) above the dew point. Coating won't cure below the minimum surface temperature. To minimize outgassing, concrete temperature should be stabilized or in a descending temperature mode and the concrete primed with a suitable epoxy primer.

7.11 SERIES 215ML CLEANUP

Flush and clean all equipment immediately after use with xylene, MEK, or when required by SCAQMD regulations, No. 74 Thinner.

8.0 FIBERGLASS MAT INSTALLATION

8.1 SERIES 211-215 FIBERGLASS MAT

Fiberglass Mat Placement: Measure the length desired (equal to the area to be basecoated.) This area will vary with application rate. Cut the glass with scissors or fiberglass shears. Roll up the cut piece of mat tightly for easier handling.

While the Series 215ML basecoat mortar is still wet, lay and press the Series 211-215 3/4 oz fiberglass mat into the surface (free fiber side of mat into basecoat, shiny bonded side facing out). Using a rib roller, backroll fiberglass to remove any air pockets, voids or wrinkles. Once mat is placed, saturate mat with Series 22 saturant coat until

fiberglass mat is completely wet out. It is necessary to be especially careful to press the mat firmly into corners.

When forming a seam with two pieces of mat, overlap minimum 2-3 inches. Roller apply additional saturant liquid in joint areas to adhere (glue) overlaps.

9.0 SATURANT COAT INSTALLATION

9.1 SERIES 22 EPOXOLINE

The saturant coat for the Series 215ML/22 mat reinforced lining system is Series 22 Epoxoline, thinned up to 5% with Tnemec No. 2 thinner.

Once mat is placed, immediately roller apply the Series 22 saturant coat until fiberglass mat is completely wet-out. Avoid runs and sags from overbuilding the saturant coat. It is necessary to be especially careful to press the mat firmly into corners. **Note:** Once the saturant coat has cured hard 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 Tnemec Technical Bulletin 98-11 for more information.

9.2 SERIES 22 CURING TIME

	95°F (35°C)	75°F (24°C)	50°F (10°C)
To Touch	2 1/2 Hours	7 Hours	24 Hours
Dry Through	5 1/2 Hours	18 Hours	27 Hours
Minimum to Recoat	4 Hours	16 Hours	32 Hours
Return to Service	5 Days	5 Days	7 Days
Maximum to Recoat	7 Days	7 Days	7 Days

Note: These times are based on 20 mil (500 micron) dry film thickness. Cure time varies with surface temperature, air movement, humidity, and film thickness. **Ventilation:** When used as a tank lining or in enclosed areas, provide adequate ventilation during application and cure.

9.3 SERIES 22 PACKAGING

KIT SIZE	PART A	PART B	YIELD (Mixed)
Large †	5 gallon pail	5 gallon pail	10 gallons (37.85 L)
Medium	6 gallon pail (partial fill)	3 gallon pail (partial fill)	5 gallons (15.14 L)
Small	1 gallon can (partial fill)	1 gallon can (partial fill)	1 gallon (3.79 L)

†Offered for plural component application.

9.4 SERIES 22 COVERAGE RATES (THEORETICAL)

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Minimum	16.0 (400)	16.0 (400)	100 (9.3)
Maximum	40.0 (1016)	40.0 (1016)	40 (3.7)

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

9.5 SERIES 22 MIXING

Mix the entire contents of Part A and Part B separately. Scrape all of the Part A material and Part B into a suitable container by using a flexible spatula. Use a variable speed drill with PS Jiffy blade and mix blended components for a minimum of two minutes. Apply the mixed material within the spray or pot life limits after agitation. For optimum application characteristics, material temperature should be between 70°F (21°C) and 80°F (27°C). **Note:** A large volume of material will gel quickly if not applied or reduced in volume.

Caution: Do not reseal mixed material. An explosion hazard may be created.

9.6 SERIES 22 THINNING

May thin up to 5% or 6 fluid ounces per gallon with No. 2 Thinner. Do not thin in areas with strict extractable regulations.

9.7 SERIES 22 POT LIFE & SPRAY LIFE

TEMPERATURE	SPRAY LIFE	POT LIFE
75°F (32°C)	25 minutes with 5% thinning	45 minutes with 5% thinning

9.8 SERIES 22 MATERIAL & STORAGE TEMPERATURE

Minimum storage temperature is 20°F (-6°C) and maximum is 110°F (43°C). Prior to application, the material temperature should be between 70°F and 80°F (21°C and 27°C). It is suggested the material be stored at these temperatures at least 48 hours prior to use.

Temperatures will affect workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

9.9 SERIES 22 APPLICATION EQUIPMENT

Roller: Use 3/8" or 1/2" (9.5 mm to 12.7 mm) synthetic woven nap cover.

Plural Component Application: Contact Tnemec Technical Services for detailed equipment requirements.

9.10 SERIES 22 SURFACE TEMPERATURE

Minimum surface temperature is 50°F (10°C) and maximum is 130°F (54°C). The surface should be dry and at least 5°F (3°C) above the dew point. Coating will not cure below the minimum surface temperature. To avoid outgassing, concrete temperature should be stable or in a descending temperature mode.

9.11 SERIES 22 CLEANUP

Flush and clean all equipment immediately after use with Tnemec No. 4 Thinner. Use Tnemec No. 68 Thinner when needing to comply with VOC regulations.

10.0 TOPCOAT INSTALLATION

10.1 SERIES 22 EPOXOLINE

The protective topcoat for the Series 215ML/22 mat reinforced lining system is Series 22 Epoxoline. Spray and backroll (2-3 coats) or roller apply in multiple coats (2-4) to achieve a pinhole-free, 20-30 mils (508-762 microns) DFT thickness. Please reference section 9.0 for

specific information regarding curing time, mixing and application equipment.

10.2 SERIES 22 EPOXOLINE COVERAGE RATES

DRY MILS (MICRONS)	SQ. FT./GAL COVERAGE RATE (M ² /GAL)
20.0-30.0 (508-762)	80-53 (7.5-5.0)

11.0 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 215ML/22 system applied to a conductive surface. All high voltage discontinuity (spark) testing shall be performed in accordance with NACE SP0188 and the procedures outlines therein.

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" or "Return to 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.

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 into 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)	Voltages (V)
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 shall be performed using same testing procedures as outlined above. If utilizing alternate high voltage DC holiday detectors, never exceed 100 volts DC per mil or contact Tnemec Technical Services for recommended voltage settings. Excessive voltage may produce a holiday in the coating film.

12.0 REPAIR

For patching and repairing small areas, less than 1 sq. ft, grind affected area and reapply as per initial instructions. Overlap 2" to 3" 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 22 Epoxoline.

13.0 FINAL CURING TIME

Allow 7 days at 75°F (24°C) final cure before placing into service. Contact Tnemec Technical Service if deviations are required.

14.0 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 Material Safety Data Sheet from Tnemec Company, Inc. at 1-800-TNEMEC1 or www.tnemec.com.

15.0 MAINTENANCE

The service life of the Series 215ML/22 epoxy lining system depends on regular maintenance and repair - fixing areas that have been impacted, abraded, or otherwise damaged during service. The Series 215ML/22 system should be inspected annually to identify and correct any damaged areas.

For patching and repairing small areas, less than 1 sq. ft, grind affected area and patch with Series 22 or FC22. Series 211-211 fumed silica can be added if greater thicknesses are required. Overlap 1" to 2" onto the existing material and square off with masking tape. Make sure areas for overlap are scarified and feathered. Allow for proper curing prior to placing the structure into service.

For larger areas, greater than 1 sq. ft, abrade the affected area and reapply the system as specified herein.