

TNEMEC SECONDARY CONTAINMENT LINING SYSTEM SCHEDULE

PART 2: PRODUCTS (Tnemec Co, KC, MO.)

2.01 MATERIALS

- A. System Type 1 – Reinforced Novolac Epoxy System.
 - 1. System shall consist of five products: Series 218 as specified herein; Series 237SC Power Tread primer; Series 237SC Power Tread, aggregate filled, modified polyamine epoxy to provide 60-80 mils thickness, Series 237SC Fiberglass Mat and Series 282, polyamine Novolac epoxy finish coat.
 - 2. System shall consist of a nominal thickness of 80-110 mils DFT (dry film thickness) as manufactured by Tnemec Co., with Series 237 to form cove and feather edged up vertical surfaces as approved and Series 282 finish coat, in the texture selected by the Engineer.
- B. System Type 2 – Non-Reinforced Novolac Epoxy System .
 - 1. System shall consist of three products: Series 218 as specified herein; Series 201 primer ; and Series 282 finish coats as specified above.
 - 2. System shall consist of a nominal thickness of 22.0-28.0 mils DFT (dry film thickness) as manufactured by Tnemec Co., with modified epoxy cement for cove cant and filling under primer and finish coat in the texture selected by the Engineer.

2.02 CHEMICAL RESISTANCE

- A. The installed and finished floor and cove base material shall be chemically resistant in two specific categories:
 - 1. Process chemical resistant.
 - 2. Resistant to miscellaneous chemicals.
- B. Process Chemical Resistance
 - 1. Floor and base material for the Project shall withstand with no chemical attack, as determined by the Engineer the process chemicals listed below. The type of exposure to these chemicals shall involve the puddling of 2 ounces of the listed process chemicals at the concentrations and temperatures given. “Secondary Containment” is defined as: Suitable for continuous contact with chemical for up to a 72-hour period. EPA regulations require removal within 48 hours or in as timely manner as possible. Softening or discoloration may occur during exposure.
 - 2. This criteria is intended to simulate service conditions, radical spillage, pump and pipe leakage in the areas where the flooring is to be applied for the life of the installation.

3. Process chemicals for this project are as follows:

<u>Chemical</u>	<u>Concentration</u>	<u>Temperature</u>
Sodium Hypochlorite	15%	Ambient
Potassium Permanganate	--	Ambient
Hydrofluosilicic Acid	10%	Ambient

C. Miscellaneous Chemical Resistance

1. Floor and base material shall withstand, with no chemical attack or appearance change as determined by the Engineer, all petroleum products used in plant operation, and the reagents numbered 6.1.1 through 6.1.14 in ASTM D1308 when spot tested, covered for 5 days as therein described.
2. This criterion is intended to simulate chemical contact encountered in the normal occupancy by the Owner's personnel and the public.

D. Testing for compliance with any or all of the above may be ordered by the Engineer to be performed on representative floor and base materials or on the mock up unit or test floor at no additional cost to the Owner.

PART 3: EXECUTION

3.01 GENERAL

- A. In areas scheduled to receive flooring, all other work, except painting, shall be completed before work of this Section may be started.

3.02 SUBSTRATE PREPARATION

- A. Concrete and CMU shall have been cured for 28 days minimum before application of materials. Inspect all surfaces to receive seamless flooring. Report to Engineer all surfaces not acceptable to receive flooring. It shall be the responsibility of the Contractor to provide substrates acceptable for proper application of the flooring system.
- B. Prepare substrates in accordance with SSPC-SP#13/NACE No. 6 Standard. Use particular care to remove laitance in the preparation of surfaces. Abrasive or shot blast the concrete to receive materials and dispose of residue and flushing water by vacuum pickup, containerizing and removing from site, all as approved. Blast profile shall be uniform and shall meet ICRI CSP-3 finish.
- C. Chipping of concrete required to remove embedded oil and grease and subsequent patching with an approved compound is included in the work of this Section. Only a compound compatible with the membrane and flooring to be used will be allowed for patching. Preparation shall comply with manufacturer's standards for the systems. Grind if required to meet tolerances.
- D. Test substrates for moisture content and adhesion capabilities per ASTM F1869. Moisture content shall not exceed three pounds per 1,000 sq. ft in a 24-hour period. Report to Engineer, as specified above, surfaces not acceptable for materials.

- E. Maintain 60° F minimum temperature in areas to receive seamless flooring for a period of 48 hours during and 72 hours after installation.
- F. Failure to give notice to the Engineer of unsuitable substrate shall be construed as acceptance of the substrate as being satisfactory for the proper application of the materials.

3.03 INSTALLATION

- A. System Type 1 - Installation of Reinforced Novolac Epoxy resin seamless material, for curbs and bases and horizontal and vertical planes where scheduled shall be generally as follows but as approved under Submittals above:
 - 1. Apply a full parge coat of Series 218 MortarClad at a minimum 1/16” to 1/8” to all vertical surfaces, trowel applied.
 - 2. Prime all surfaces to be coated by applying an epoxy prime coat (Series 237SC) with roller/squeegee at 6.0-10.0 mils DFT.
 - 3. Mix and apply the aggregate filled, epoxy slurry (Series 237SC) to primed surfaces at 60.0-80.0 mils DFT.
 - 4. Embed Series 237SC Fiberglass Mat Reinforcement in wet epoxy slurry mix.
 - 5. Saturate the embedded 237SC Fiberglass Mat with Series 237SC saturant coat applied at 8.0-12.0 mils DFT.
 - 6. Apply finish coat (Series 282) to all surfaces at 6.0-8.0 DFT.
 - 7. Use similar procedures for curbs, pads and bases on concrete or CMU. Mask line of top of bases to provide a level termination line. Top of base shall be a clean termination as approved.
- B. System Type 2 - Installation of Non-Reinforced Novolac Epoxy resin seamless material, for horizontal and vertical planes where scheduled shall be generally as follows but as approved under Submittals above:
 - 1. Apply a full parge coat of Series 218 MortarClad at a minimum 1/16” to 1/8” to all vertical surfaces and form 1/2-in cant cove inside containment areas with Series 218, trowel applied.
 - 2. Prime all surfaces to be coated by applying an epoxy prime coat (Series 201) with roller/squeegee at 6.0-8.0 mils DFT.
 - 3. Apply Intermediate coat (Series 282) to cured prime coat at 8.0-10.0 mils DFT.
 - 4. Apply finish coat (Series 282) to cured intermediate coat at 8.0-10.0 DFT.

3.04 INSPECTION AND PROTECTION

- A. An inspection of all seamless flooring areas will be conducted by the Engineer before the areas are covered as specified below. This inspection will determine only what areas if any require repair or other corrective measures. Passage of this inspection will not constitute acceptance of the work.
- B. Provide non-staining protective construction paper as approved over the entire surface area, with joints taped, and boards or planks where subjected to especially heavy traffic or hazards.

Specifier Notes: This product selection guide is written according to the Construction Specifications Institute (CSI) Format, including *Master Format*, *Section Format*, and *Page Format*, contained in the *CSI Manual of Practice*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the drawings.

Delete all "Specifier Notes" when editing this section.

Specifier Notes: This section covers Tnemec high-performance coating systems for Commercial facilities.

This schedule is only a guide listing various coating system options for various environments and should not be used as a final specification. Additional coating systems not listed in this schedule are available, and may be more appropriate for your coating application. To finalize this coatings schedule, please contact www.rightergroup.com

Many coatings specified contain organic solvents. Consult Righter Group for compliance to local VOC regulations.

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