

Resilient Flooring Section 09650



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Sealflex Moisture Mitigation & Alkalinity Control Treatment Specification Guide

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PART 1: GENERAL

1.01 SUMMARY

- A. Section includes: Provision of vapor emission and alkalinity control treatment to suspended, on grade or below grade concrete floors for the purpose of negating the damaging effects of vapor emission and alkalinity that may prevent satisfactory installation of floorcovering materials.
- B. Related Sections:
 - 1. Section 03300 – Cast in place Concrete
 - 2. Section 09615– Vapor Retarder (Concrete Floor Moisture Membrane System)
- C. Unit prices: A unit price is required for the application of Sealflex Industries, Inc. materials in this Section. Measurement of concrete vapor emission and alkalinity control system shall be on a square foot basis.

1.02 SYSTEM DESCRIPTION

- A. Provide alkalinity control and adhesive bonding materials for the successful installation of floorcovering materials.
- B. System Performance:
 - 1. System capable of allowing installation of specific resilient flooring materials up to 5.5 pounds moisture vapor emission per 1000 square feet per 24 hours.
 - 2. System capable of allowing installation of specific resilient floorcovering materials up to 8.0 pounds moisture vapor emission per 1000 square feet per 24 hours.
 - 3. Fire/Safety/VOC concerns
 - a. Flammability: Provide water-based materials.
 - b. Hazard Rating: Materials used shall be rated as non-hazardous under OSHA regulations.
 - c. Air Quality: All products used shall comply with local and federal VOC criteria.

1.03 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product data: Submit product data, including manufacturers technical information and installation procedures.
- C. Shop Drawings: Submit shop drawings showing layout, profiles and product.
 - 1. Submit drawings indicating procedure for treating joints and cracks in concrete.
- D. Quality Assurance Submittals: Submit the following:
 - 1. Test Reports: Pre installation test reports including moisture test results.
 - 2. Qualifications: Submit manufacturer's and installers qualifications specified herein.
 - 3. Manufacturer's Instructions: Manufacturer's installation procedures.
- E. Closeout submittals: Submit the following:
 - 1. Warranty: Warranty documents specified herein.

*Specifier note: Article below should include prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate below article with Division 1 Quality Assurance Section.

1.04 QUALITY ASSURANCE

- A. Single Source Control: Obtain vapor emission and alkalinity control treatment materials from a single source.
- B. Installer Qualifications:
 - 1. Installer experienced in performing work of this section who has specialized in the installation of work similar to that required for this project.
 - a. Installer: Company approved by system materials manufacturer for specified warranty.
 - b. Installing Foreman: Individual specializing in applying specified system and shall be a contractor-approved installer.
- C. Manufacturer Qualifications: Manufacturer shall have the following:
 - 1. A minimum of 10 years in the manufacturing of moisture control, vapor emission control or alkalinity control products.
 - 2. A minimum of 3 years of product application.
 - 3. System manufacturer must have a minimum of 50 reference projects, certifying successful installations.
 - 4. A warranty program covering costs for vapor emission and alkalinity control treatment repair as well as specific resilient floorcovering materials including repair and replacement labor.
- D. Pre-installation Meeting: Conduct a pre-installation meeting to verify project requirements, substrate conditions, manufacturers installation instructions and manufacturers warranty requirements. Comply with Division 1, Project Management and Coordination, Project Meetings Section.

1.05 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirements Section
- B. Ordering: Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels attached.
- D. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.
 - 1. Store materials in a dry, secure area.
 - 2. Maintain minimum temperature of 65° F and maximum temperature of 85° F.

1.06 PROJECT/SITE CONDITIONS

- A. Environmental Requirements/Conditions:
 - 1. Do not install system or products when temperature is below 55° F or above 85° F.
 - 2. Do not install system or products until area is fully enclosed, weatherproof, acclimated and with HVAC controls fully functioning for at least 2 weeks prior to installation of materials or products.
 - 3. Site conditions and area conditions must be maintained at same value as for final occupancy.

1.07 WARRANTY

- A. Project warranty: Refer to *Conditions of the Contract* for project warranty provisions
- B. Manufacturer's Warranty: Submit for Owners acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to and not a limitation of other rights Owner may have under the contract documents.
 - 1. Provide manufacturer's standard written or printed warranty.
 - 2. Warranty coverage and limitations
 - a. Coverage shall protect against delamination and bonding failure due to moisture vapor migration up to ascribed limits as outlined in manufacturer's standard warranty for a period of 5 years from date of installation.
 - b. Coverage excludes failure due to structural failure, seismic action, vapor emissions above warranty limits as described herein, delamination due to the dimensional dynamics of the flooring materials, telegraphing of trowel

marks through the flooring material, discoloration due to moisture, caustic solutions entering the flooring through seams or joints, seam failure or voids, tears, rips, water leakage, curing compounds, mold release agents, leveling or patching compounds of any kind, improper preparation or installation or maintenance procedures.

3. Warranty Remedy:
 - a. Replacement of finished floorcovering material, labor to remove and replace, vapor emission and alkalinity control treatment products and labor costs associated with these products.
4. Underwriter Coverage of Manufacturer's Warranty: Provide warranty underwritten by a product liability insurance carrier, with minimum "A" rating from Best or equivalent rating system, in the amount of \$1,000,000.00 per occurrence.

PART 2: PRODUCTS

*Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" may cause ambiguity in specifications. Such phrases require verification – including procedural, legal and regulatory as well as responsibility for determining equivalency of products.

2.01 VAPOR EMISSION AND ALKALINITY CONTROL TREATMENT SYSTEM

- A. Manufacturer: Sealflex Industries, Inc., 2925 College Avenue, Suite B-4, Costa Mesa, CA 92626. Telephone 800-651-2098, 714-708-0850, Fax: 714-708-2711.
- B. Proprietary Products:
 1. pH Blocker/Primer 100 for blocking the negative effects of alkalinity on adhesives.
 2. SI-UltraTac 200 high solids, moisture-resistant adhesive.
 3. SI-UltraTac 255 pressure-sensitive, moisture-resistant adhesive

*Specifier note: Edit paragraph below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements, Product Substitutions Procedures Sections.

- C. Substitutions: No substitutions permitted.

2.02 ACCESSORIES

- A. Cementitious floor patching: Provide Portland based cement floor patching compound. Use of gypsum or asphalt based systems are not permitted.

2.03 SOURCE QUALITY

- A. Source Quality: Obtain vapor emission and alkalinity control treatment as manufactured by Sealflex Industries, Inc.

PART 3: EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions as necessary.

3.02 EXAMINATION

- A. Site verification of conditions: Verify concrete substrate conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 1. Prior to work in this section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
 2. Verify that work in this section may be installed in strict accordance with the original design, all pertinent codes and regulations and all pertinent portions of the referenced standards.

3.03 PREPARATION

A. Concrete Moisture Vapor Emission Testing:

1. Perform anhydrous calcium chloride test in accordance with ASTM F-1869. Proceed with installation only after substrates have been thoroughly tested to ascertain moisture vapor emission transmission readings of the concrete.

***Spec writer note: Select one of the following and delete other from specification:** () Testing shall be performed by acceptable and qualified independent testing agency OR () Testing shall be performed jointly by the flooring contractor and general contractor.

2. Provide a minimum of three (3) tests for the first 1000 square feet of area and one (1) additional test for each additional 1000 square feet of area to be tested.
3. Submit results of tests to General Contractor, Architect, Flooring Contractor and Owner's representative prior to commencing with this section.

B. Slab Preparation:

1. When using the pH Blocker/Primer 100 as manufactured by Sealflex Industries, Inc. prepared the concrete slab by shot blasting using a small shot profile (230-280) to ensure the porosity of the concrete surface.
2. Fill cracks and depressions with a quality Portland based cementitious underlayment patching compound. DO NOT USE GYPSUM BASED PATCHING COMPOUNDS.

3.04 INSTALLATION

A. SI-UltraTac 200 Adhesive (Reference: Section 1.02-B-1)

1. For usage with solid vinyl floorcovering products including tile, planks and heterogeneous/homogenous sheet vinyl products and similar materials. If the moisture vapor emission transmission (MVET) is above 3 lbs per 1000 square feet per 24 hours up to 8 pounds per 1000 square feet per 24 hours, then utilize the Sealflex Industries, Inc. SI-UltraTac 200 Adhesive alone to adhere the flooring material. Check with Sealflex Industries, Inc. to verify if the specified floorcovering is compatible. Apply material in accordance with manufacturer's printed installation procedures.

B. SI-UltraTac 255 Pressure-Sensitive adhesive (Reference Section 1.02 B-1)

1. For usage with Vinyl composition tile, some vinyl plank materials, carpet goods, carpet tile and similar products. If the moisture vapor emission transmission (MVET) is above 3 lbs per 1000 square feet per 24 hours and less than 5.5 pounds per 1000 square feet per 24 hours, then utilize the Sealflex Industries, Inc. SI-UltraTac 255 Adhesive without the pH blocker/primer100 to install floorcovering. Check with Sealflex Industries, Inc. to verify if the specified floorcovering is compatible. If the pH level of the concrete is greater than 9, then the Sealflex Industries, Inc. pH Blocker/Primer 100 **must be** utilized prior to installation of the floorcovering using the SI-UltraTac 255 adhesive. Apply material in accordance with manufacturer's printed installation procedures.

C. pH Blocker/Primer 100 & SI-UltraTac 255 Pressure Sensitive adhesive (Reference: Section 1.02-B-2)

1. If the MVET is above 5.5 lbs per 1000 sq. ft. per 24 hours and less than 8 lbs per 1000 sq. ft. per 24 hours then utilize the Sealflex Adhesive System consisting of the Sealflex Industries, Inc. pH Blocker/Primer 100 and the SI-UltraTac 255 adhesive in installing the specified floorcovering. Check with Sealflex Industries, Inc. to verify that the specified floorcovering is compatible. Apply material in accordance with manufacturer's printed installation criteria.

D. Limitations

1. Do not install on vertical surfaces.
2. Do not install materials if temperature is below 65° F or above 85° F.
3. Do not allow materials to freeze.