



GUIDE SPECIFICATION

SECTION 09 96 53 ELASTOMERIC WALL COATING

SIKAGARD[®] 570 (MONOLASTEX RE[®]) SYSTEM

SPEC NOTE: This specification includes materials and methods for the application of the SikaGard elastomeric waterproofing membrane direct to masonry, block, brick, concrete, stone, cementitious material, plastic, metal, mastics, painted surfaces, plaster, or other approved substrate and left exposed. Sikagard 570 is a single-component, high-build, water-based cross-linked acrylic, UV cured elastomeric waterproofing coating system designed to accommodate movement and cracking in structures. Sikagard 570 exhibits excellent color retention, has a dirt resistant surface, is capable of very high moisture vapor transmission and has excellent low/high temperature crack bridging properties.

This specification serves as a guideline and should be adapted to suit the needs of each individual project by the designer. It is prepared in accordance with the CSI three-part section format and should be included as a separate section under DIVISION 09 – Finishes. Improvements and other changes to the contents may be made only with the written approval of the designer. **Upon completion of editing, we recommend you contact your local Sika representative to review for accuracy prior to issuance for bid or construction.**

PART 1 GENERAL

1.01 SUMMARY

- A. This section specifies all labor, materials, transportation, equipment and services necessary to install a **Sikagard[®] 570 (Monolastex RE[®])** single-component, high-build, water-based cross-linked acrylic, UV cured elastomeric waterproofing wall coating system, on masonry, block, brick, concrete, stone, cementitious material, plastic, metal, mastics, painted surfaces, plaster, or other approved substrate by manufacturer and shown on the drawings and described herein.
- B. Section includes surface preparation and application of **Sikagard[®] 570 (Monolastex RE[®])** acrylic-based elastomeric waterproofing wall coating system to the following exterior substrates:
 - 1. Painted cement wall board
- C. Related Sections
 - 1. Section 03 00 00 : Concrete
 - 2. Section 04 20 00 : Unit Masonry.
 - 3. Section 07 24 00 : Exterior Insulation and Finish Systems.
 - 4. Section 07 90 00 : Joint Protection

1.02 SUBMITTALS

- A. Product Data: Provide product data sheets and MSDS for each type of product indicated in this section.

- B. Contractor Certification: Installer shall provide written documentation from the manufacturer of their authorization to install the system, and eligibility to obtain the warranty specified in this section.
- C. Color Chart: Submit two (2) copies of the manufacturer's standard color chart.
- D. Certification showing full time quality control of production facilities and that each batch of material is tested to ensure conformance with the manufacturer's published physical properties. The manufacturer shall have an ISO 9001-2000 certified quality system.
- E. Samples for Verification: Submit samples of specified elastomeric wall coating system
 1. Submit samples on same type of substrate as that to receive application, 6 inches square.
 2. Samples shall represent finished color and surface texture.
- F. VOC Compliance: Manufacturer's certification that all waterproofing system products meet current Volatile Organic Compound (VOC) regulations as established by the State in which they are being installed; and stating total VOC content, in grams per liter, for all system components (i.e. primers, adhesives, coatings, etc.).
- G. Prior to commencement of the application of the coating system, the installer must submit the following to the Engineer and manufacturer's representative:
 1. Photographs of the structure to be coated.
 2. Sika Warranty Registration Form.

1.03 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
 1. Waterproofing Manufacturer must show evidence that the specified membrane has been manufactured by the same organization or direct affiliate for fifteen (15) years.
 2. Waterproofing Manufacturer shall have available an in-house technical staff to assist the contractor, when necessary, in application of the products and final inspection of the assembly.
- B. In-Progress Inspection: During the application process, the coating membrane manufacturer or his representative shall inspect the work involved.
- C. Installer's Qualifications: The Contractor shall demonstrate qualifications to perform the work of this Section by submitting the following documentation:
 1. Certification or license by the waterproofing membrane manufacturer as an authorized applicator of the product the installer intends to use.
- D. Source Limitations: All components listed in this section shall be provided by a single manufacturer or approved by the primary waterproofing manufacturer.
- E. Final Inspection
 1. Manufacturer's representative shall provide a comprehensive final inspection after completion of the coating system. All application errors must be addressed and final punch list completed prior to the issuance of the warranty.

- F. Mockups: Prepare one mockup of coating system with chosen color to verify preliminary selections made under sample submittals.
 - 1. Architect will select exterior wall surface of at least ten square feet to represent surfaces and conditions for application of elastomeric coating.
 - 2. If Architect/Engineer determines mockup does not comply with requirements, modify mockup or construct new mockup until mockup is approved.
 - 3. Final approval of color selections will be based on approved mockup.

- G. Pre-Installation Meeting:
 - 1. Conduct meeting at Project site.
 - 2. Review requirements for waterproofing including:
 - a. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays
 - b. Site use, access, staging, and set-up location limitations
 - c. Surface preparation and substrate condition and pretreatment.
 - d. Installation procedures.
 - e. Special details.
 - f. Minimum curing period.
 - g. Testing and inspection requirements.
 - h. Site protection measures.
 - 3. Contractor's site foreman, waterproofing manufacturer's technical representative, waterproofing Installer, Owner's Agent, and Architect/Engineer shall attend.

1.04 COMPLIANCE

- A. Work for this project shall be conducted in accordance with all applicable Local, State and Federal laws and regulations with the most restrictive law and regulations applying.
- B. Permits, inspections and appropriate certificates as required by work under this contract shall be obtained by and paid for by the Contractor.
- C. The Contractor shall comply with all ordinances regarding dust, debris and noise.
- D. The Contractor shall familiarize himself with all aspects of job conditions prior to submitting his bid for the project.
- E. The Contractor shall protect all adjacent surfaces, fixtures and equipment to prevent damage in any form.
- F. Any adjacent surface, coating system, fixture or equipment damaged in this sequence of work shall be repaired or replaced at no cost to the owner by the Contractor to its original condition.
- G. All waterproofing system components shall meet current VOC regulations as established by the State in which they are being installed; and stating total VOC content, in grams per liter, for all system components (i.e. primers, adhesives, coatings, etc.).

1.05 TESTING

- A. Upon completion of the coating membrane work, the manufacturer's representative and the contractor will calculate the coverage rate and subsequent dry film thickness of the applied coating material to ensure that the minimal requirements of this technical specification have been met. If actual dry film thickness needs to be measured, then the

dry film thickness may be measured with a Tooke Gage or cutting out of a physical sample and measurement under a graded reticule microscope.

- B. If minimum dry film thickness requirements have not been met by the contractor, then additional coating membrane material must be applied by the contractor at his cost to fulfill the specification requirements.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to Project site in original containers with seals unbroken, labeled with waterproofing manufacturer's name, product brand name and type, date of manufacture, lot number, and directions for storing and mixing with other components.
- B. Keep materials dry and do not allow materials to be exposed to moisture during transportation, storage, handling, and installation. Reject and remove from Site new materials which exhibit evidence of moisture during application, or have been exposed to moisture.
- C. Store materials in original, undamaged containers in clean, dry, protected location on raised platforms with weather-protective coverings, within temperature range required by waterproofing manufacturer. Protect stored materials from direct sunlight. Waterproofing manufacturer's standard packaging and covering is not considered adequate weather protection. Use "breathable" type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Cover and protect materials at the end of each work day. Do not remove any protective tarpaulins until immediately before the material will be installed.
- D. Store all materials at temperatures between 35°F and 86°F.
- E. Remove and replace materials that cannot be applied within stated shelf life.

1.07 PROJECT CONDITIONS

- A. All surfaces to be coated shall be clean, sound and properly prepared for the coating application.
- B. Verify existing dimensions and details prior to installation of materials. Notify Architect/Engineer of conditions found to be different than those indicated in Contract Documents. Architect/Engineer will review situation and inform Contractor and Installer of changes.
- C. Observe Owner's limitations and restrictions for site use and accessibility.
- D. Application of the coating membrane shall not commence nor proceed during conditions outside of the general ambient parameters for application (between 40°F and 95°F), or during pending inclement weather. Inclement weather must be anticipated such that the applied **Sikagard® 570 (Monolastex RE®)** membrane is adequately dried and cured to prevent wash-off in driving rain.
- E. All terminations for **Sikagard® 570 (Monolastex RE®)** waterproofing wall coating system shall be as per Architect/Engineer's drawings and details.

- F. Install materials in strict accordance with safety requirements required by waterproofing manufacturer, Material Safety Data Sheets, and local, state, and federal rules and regulations.

1.08 WARRANTY

- A. Each warranty varies in scope and terms. Contact Sika Corporation for exact warranty terms and conditions to meet the specific project requirements.
- B. **Weathertight Warranty:** Provide Manufacturers standard Labor and Material Warranty form in which manufacturer agrees to repair or replace elastomeric coatings that fail within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Water penetration through the coating.
 - b. Deterioration of coating beyond normal weathering.
 - 2. **Warranty Period:** 10 years from date of Substantial Completion

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

- A. **Sika Corporation**
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 800-933-7452
Fax: 201-922-6225
www.sikaconstruction.com

2.02 ELASTOMERIC FINISH COATING

- A. A single-component, high-build, water-based cross-linked acrylic, exhibiting excellent color retention, dirt resistant surface, capable of very high moisture vapor transmission, excellent low/high temperature crack bridging properties, UV cured elastomeric waterproof coating system designed to accommodate movement and cracking in structures, **Sikagard[®] 570 (Monolastex RE[®])**.
 - 1. Application: Spray, roller, or brush
 - 2. Accelerated Weathering: Excellent color retention, no loss of flexibility, and no surface defects, ASTM G53.77
 - 3. Crack Bridging Capability: 0.008" - 0.052" depending on thickness and temperature
 - 4. Elongation: 360% at 32°F, 515% at 73°F
 - 5. Solids by Volume: 48.6%
 - 6. Solids by Weight: 61.1%
 - 7. Water Vapor Permeability: 4.5 perms, BS.3177
 - 8. VOC: .22 lb/gal (26.9g/L)

2.03 PRIMERS

- A. A fast-drying, two-component, water-based, adducted polyamide epoxy primer for concrete, masonry and previously coated surfaces, **Sika Bonding Primer (Bonding Primer™)**.
- B. A two-component, cyclo-aliphatic, amine cured material with a high level of corrosion resistance for metal, modified bitumen surfaces, and chemically treated wood, **Sikalastic Metal Primer (Epoxy Primer™)**.
- C. A single-component, water-based, metal reactive acrylic emulsion primer, with electrochemically active, anti-corrosive and exchange pigments, barrier additives and anti-flash rust agents used for coating new conventionally prepared steelwork and a variety of metal substrates including ferrous metals, galvanized surfaces, stainless steel, zinc, lead, aluminum, tin, copper and brass, **Sikalastic Metal Primer WB (Aqueous Metal Primer™)**.

2.04 CONCRETE REPAIR

- A. A two-component, polymer-modified, Portland cement based, fast-setting, non-sag repair mortar for vertical and overhead surfaces containing FerroGard 901, a penetrating corrosion inhibitor, **SikaTop 123 PLUS®**.
- B. A single component, polymer modified, fiber reinforced, Portland cement based repair compound, which exhibits unique hydraulic properties to produce a rapid curing mortar with enhanced polymeric properties, **SikaQuick Fastfill® (Fastfill®)**.

2.05 AUXILLARY MATERIALS

- A. Crack Sealant Compound: A low-modulus, high-performance, 1-component, polyurethane-based, non-sag elastomeric sealant meeting Federal Specification TT-S-00230C, Type II, Class A; ASTM C-920, Type S, Grade NS, Class 100/50, use T, NT, G, M; Federal Specification for silicones - TT-S-001543 A, Type non-sag, **Sikaflex® 15LM**, or equal approved by waterproofing manufacturer.
- B. Local Reinforcement: A conformable, random woven fiberglass mat for total or localized reinforcement of the waterproofing membrane system, which provides greater impact resistance and greater resistance to excessive thermal and structural movement while maintaining elasticity and membrane film integrity, **Sika Reemat® Standard (Reemat® Standard)**.

PART 3 EXECUTION

3.01 INSPECTION

- A. The Contractor shall examine all surfaces to be coated with the specified coating membrane system to verify that it is acceptable and proper for the specified application.
- B. The Contractor shall not proceed with the scope of work until all defects in the substrate have noted, examined by the Architect/Engineer, and approved for remedial and coating work.

3.02 SUBSTRATE PREPARATION

- A. All surfaces to be coated must be clean, sound, and dry at the time of coating material application.
- B. The existing coating system must be tightly adhered to the substrate. A bond and compatibility test must be conducted to qualify the existing coating system as a candidate for recoating with the new **Sikagard® 570 (Monolastex RE®)** elastomeric waterproofing wall coating system. Prior to application, the manufacturer's technical representative must be contacted to schedule the test.
- C. Remove hardware and hardware accessories, plates, machined surfaces, light fixtures, and similar items already installed that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating. After completing coating operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- D. Pressure wash (3000 psi), with the spray tip no more than 4" from the surface, all coated and bare surfaces using a high quality commercial detergent with clean water to remove all chalking effect, all loose coating material, light scale deposits and other surface contamination down to sound masonry substrate. Rinse with fresh water to ensure full cleanliness and removal of the detergent solution. Allow surfaces to dry thoroughly before continuing with surface preparation efforts. Pressure washed surfaces must be primed within a reasonable time frame before any re-contamination of the surface by airborne contaminants.
- E. Visually inspect surface. Remove loose surface features back to sound masonry substrate and power tool clean area (SSPC-SP3). In accordance with owner's aesthetic standards, fill to flush all spalled areas using the appropriate masonry repair mortar or appropriate caulking material. For heavily damaged areas, the concrete wall board shall be removed and replaced with like material.
- F. For spalled areas of concrete less than 1/4" deep, use **SikaTop 123 PLUS®**, a two-component, polymer-modified, Portland cement, fast-setting, non-sag, high performance repair mortar, mixed and applied per the instructions on the bag label and the product technical data sheet. Use a trowel of appropriate type and texture to match the texture of surrounding masonry surface and fill to flush.
- G. For spalled areas of concrete more than 1/4" deep, use **SikaQuick Fastfill® (Fastfill®)**, a quick-set, high early strength repair mortar, mixed and applied per the instructions on the bag label and the product technical data sheet. Use a trowel of appropriate type and texture to match the texture of surrounding masonry surface and fill to flush.
- H. Exposed metal substrates that are part of the wall envelope system (embedded metal, vents, flashings, etc.) must be power tool cleaned (SSPC-SP3) and primed with **Sikalastic Metal Primer WB (Aqueous Metal Primer™)** within 5 hours of cleaning efforts and allowed to cure sufficiently before inclement weather to prevent wash-off by driven rain.
- I. Clean substrates of substances that could impair bond of coatings, including dirt, oil, grease, and incompatible paints and encapsulants. Do not coat surfaces if moisture

content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.

- J. Perform cleaning and coating application so dust and other contaminants from cleaning process will not fall on wet, newly coated surfaces.

3.03 CRACK REPAIRS

- A. After cleaning has been performed, cracks less than 1/16" wide shall be sealed with **Sikaflex® 15LM**, or equal approved by waterproofing manufacturer. Cracks shall be cleared of all loose debris and dirt and widened slightly at the surface to accommodate crack filler application. Apply crack sealant by knifing into crack or gunning over the crack surface, followed by tooling to match adjacent surface profile, pressing the sealant into the crack cavity to fill completely.
- B. Cracks 1/16" to 1/8" wide shall be routed to a ½" by 1" groove, backer rod installed, and sealant applied as outlined above.
- C. Localized reinforcement utilizing **Sika Reemat® Standard (Reemat® Standard)** is required at all crack locations that exceed 1/16" in width.
- D. All joints filled with silicone caulking where the silicone will remain in place require localized reinforcement utilizing **Sika Reemat® Standard (Reemat® Standard)**.

3.04 COATING MEMBRANE APPLICATION

- A. Apply the **Sikagard® 570 (Monolastex RE®)** elastomeric waterproofing membrane system in accordance with the manufacturer's written instructions.
 - 1. Use equipment and techniques best suited for substrate and type of material being applied.
 - 2. Coat surfaces behind movable items the same as similar exposed surfaces.
 - 3. Apply each coat separately according to the manufacturer's written instructions.
 - 4. Mix all coating materials in strict accordance with the instructions on the container labels and the product technical data sheets.
 - 5. Apply coatings to prepared surfaces as soon as practicable after preparation and before subsequent surface soiling or deterioration.
- B. Prime all power tool cleaned exposed metal surfaces with two (2) coats of **Sikalastic Metal Primer WB (Aqueous Metal Primer™)** applied by brush or roller at 4-5 mils WFT per coat, ensuring uniform film dimension without pinholes or holidays. The second coat may be applied over the first coat as soon as the first coat has dried through. Overlap at least 1" over the feathered edge of tightly adhered existing coating to ensure a full corrosion inhibitive barrier film. On uncoated surfaces, apply primer to the edge of the metal substrate ensuring full coverage at the border with surrounding concrete.
- C. Prime all surfaces of tightly adhered existing coating and cleaned uncoated masonry surfaces, including patched spall areas, with **Sika Bonding Primer (Bonding Primer™)**, a two-component, water-based epoxy primer, applied by airless spray or roller at a wet film thickness of about 4 mils WFT (350-400 ft²/gallon) ensuring uniform coverage. The **Sika Bonding Primer (Bonding Primer™)** may be applied over the previously applied and dry **Sikalastic Metal Primer WB (Aqueous Metal Primer™)**, but it is not necessary. Ensure that all existing coating has been primed with the Sika Bonding

Primer. Allow to cure and dry to the touch before over coating with the **Sikagard® 570 (Monolastex RE®)** UV cross-linked acrylic elastomeric wall coating membrane.

- D. Membrane Reinforcement: Utilizing **Sika Reemat® Standard (Reemat® Standard)**, apply localized reinforcement at all wall penetrations, silicone sealant locations, repaired crack widths exceeding 1/16", and at all locations indicated on the approved architectural drawings.
1. Following the application of the primer coat, apply a local stripe coat of **Sikagard® 570 (Monolastex RE®)** at a width a minimum of 1" wider than the reinforcement, and while wet, insert **Sika Reemat® Standard (Reemat® Standard)** reinforcement into the wet membrane and backroll to full embedment/saturation adding additional material as needed.
 2. Ensure that local reinforcing mesh is not in tension during embedment.
- E. Apply two (2) coats of the **Sikagard® 570 (Monolastex RE®)** UV cross-linked acrylic elastomeric wall coating over properly primed surfaces by airless spray, brush or roller at 15 mils WFT/coat (106 ft²/gallon/coat on a smooth surface). Dry film thickness of coating membrane, once cured and dried, must total a minimum of 11-15 mils DFT. Ensure that all application is uniform, pinhole and holiday free and cosmetically acceptable to the Engineer and the Owner. Anticipate inclement weather to prevent wash-off of inadequately dried coating material.
- F. Spray Application: Use spray equipment for application only when permitted by authorities having jurisdiction. Wherever spray application is used, do not double back with spray equipment to build up film thickness of two coats in one pass.

3.05 CLEANING AND PROTECTION

- A. At the end of each work day, remove trash, empty cans, rags and other discarded materials from Project site. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.
- B. After completing coating application, clean glass and spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Remove all masking before coating material has dried and protective shrouds after coating material has dried.
- D. Protect work of other trades against damage from coating system. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect or Engineer, and leave in an undamaged condition.
- E. At completion of construction activities, touch up and restore damaged or defaced coated surfaces.

END OF SECTION

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