

# MAYA LIN ELEMENTARY SCHOOL

## SEALANT AND WALL COATING REPAIRS

845 TAYLOR AVENUE  
ALAMEDA, CALIFORNIA 94501



VICINITY MAP  
ALAMEDA

NTS

### SUMMARY OF WORK

- 1- CLEAN AND PREP WALL SURFACES
- 2- REMOVE EXISTING SEALANT
- 3- INSTALL SILICONE ELASTOMERIC COATING.  
COLOR TO MATCH EXISTING
- 4- INSTALL SEALANT & BACKER ROD

### SPECIFICATION

JOINT SEALANT  
ELASTOMERIC COATING

### INDEX OF DRAWINGS

A000	COVER SHEET
A001	SITE PLAN
A002	ELEVATIONS
A500	DETAILS & SPECIFICATIONS
A501	SPECIFICATIONS



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- AQUATIC DESIGN
- POOL ENGINEERING
- STRUCTURAL
- GEOTECHNICAL
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- ENVIRONMENTAL
- LABORATORY SERVICES

COVER SHEET

MAYA LIN ELEMENTARY SCHOOL  
825 TAYLOR AVENUE  
ALAMEDA, CA

REV	DATE	DESCRIPTION
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### BID SET

Signature Date:

Project No: FT226038

Scale: AS NOTED

Date: 8/12/22

Drawn By: S. CHILDS

Designed By: A. Weber

A000







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SITE PLAN

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Signature Date:

Project No:	FT226038
Scale:	1/16" = 1'-0"
Date:	09/02/22
Drawn By:	M.Haddadan
Designed By:	A. Weber

A001

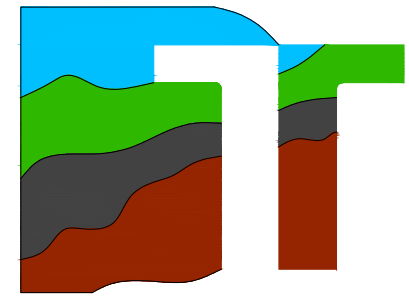




WEST ELEVATION



SOUTH ELEVATION



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ELEVATIONS PLAN  
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A002



Alameda Unified School District-- Project Number FT226038  
Maya Lin Elementary Waterproofing Repairs  
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SECTION 09 96 53  
SILICONE ELASTOMERIC COATINGS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections as provided by AUSD apply to this Section.
- 1.2 SUMMARY
- A. Section includes surface preparation and the application of elastomeric coatings on exterior substrates.
- 1.3 RELATED SECTIONS
- A. Pertinent Sections specifying Volatile Organic Compound (VOC) Content Restrictions.
- 1.4 REFERENCES
- A. California Code of Regulations, Title 24, Part 11 California Green Building Standards Code, "CAL-Green".
- B. California Code of Regulations, Title 24, Part 2, California Building Code (CBC), International Building Code, with California Amendments.
- 1.5 SUBMITTALS
- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples for Verification: For each type of coating system and each color and gloss of topcoat.
1. Submit Samples on rigid backing, 8 -inches (200 mm) square.
2. Step coats on Samples to show each coat required for system.
3. Label each coat of each Sample.
4. Label each Sample for location and application area.
- C. Product List: For each product indicated, include the following:
1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.

SILICONE ELASTOMERIC COATINGS  
100% CD Set 8/12/22

09 96 53 - 1

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2. Printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
3. VOC content.
- D. Closeout Submittals:
1. Operation and Maintenance Data: For each type of elastomeric coating system.
- a. Recoating Requirements: To verify compatible recoating products (typically not conventional paint).
2. Warranty: Submit specified 20-year warranty.

1.6 MAINTENANCE MATERIAL SUBMITTALS

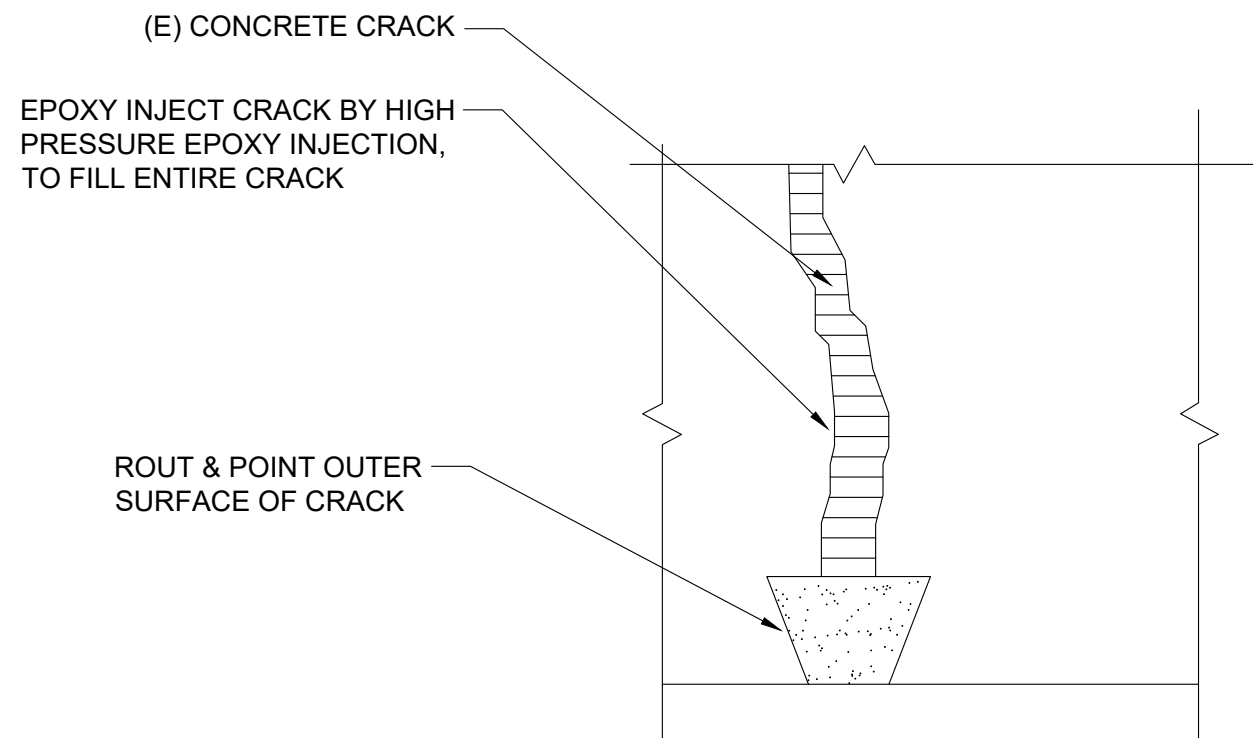
- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Quantity: 3 percent of each material and color applied.

1.7 QUALITY ASSURANCE

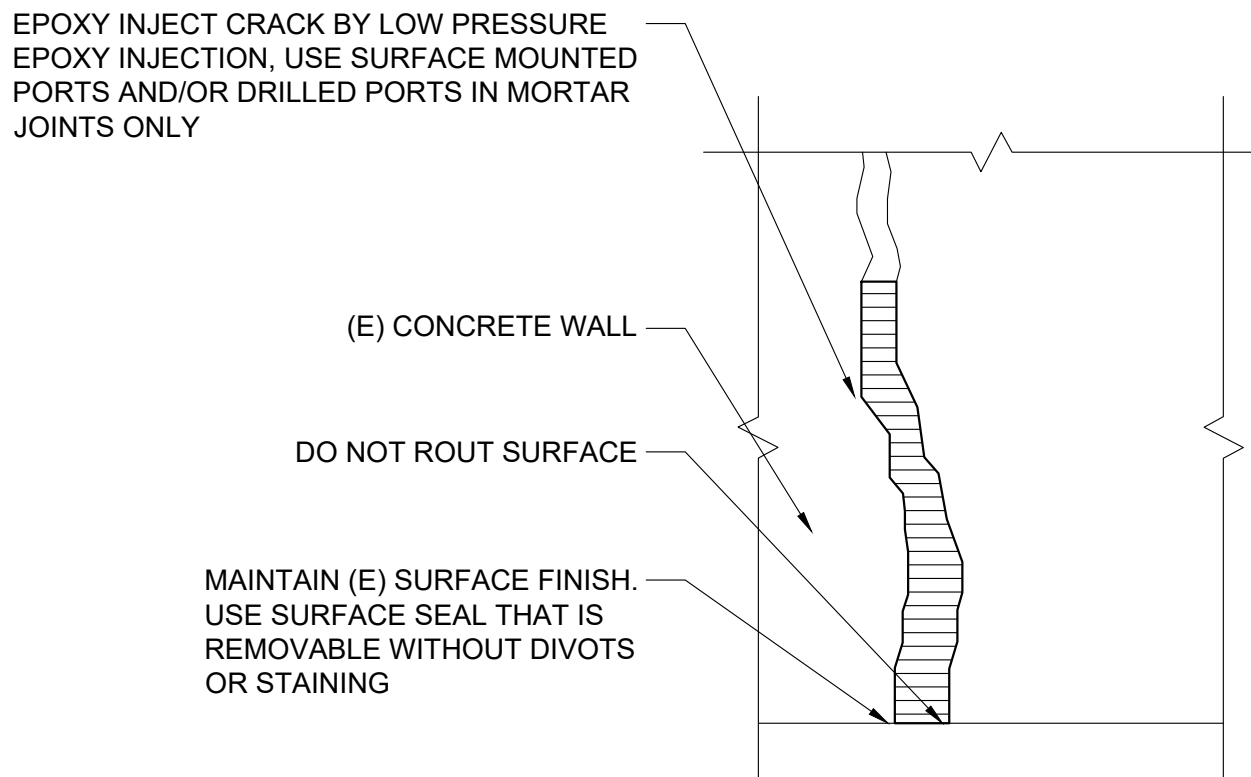
- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
- a. Vertical and Horizontal Surfaces: Provide samples of at least 4 sq. ft (0.4 sq. m).
- b. Other Items: Architect will designate items or areas required.
2. Coating System Adhesion Mockups:
- a. Apply mockups of coating system to substrate(s) both with and without primer approved by the system manufacturer.
- b. Install 2" wide cheese cloth strips in mockups leaving a 3" tab that is not embedded in the coating.
- c. After mockup samples have cured 10 days, or time as required by the manufacturer, pull cheese cloth strips to demonstrate coating adhesion.
- 1) Proper Adhesion: Difficult to generate enough hand-applied force to peel cheese cloth off.
- 2) Inadequate Adhesion: Easy to hand-apply force to peel cheese cloth off (see photo below).

SILICONE ELASTOMERIC COATINGS  
100% CD Set 8/12/22

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ROUT AND POINT CRACK  
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LOW PRESSURE CRACK INJECTION  
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SECTION 09 96 53  
SILICONE ELASTOMERIC COATINGS

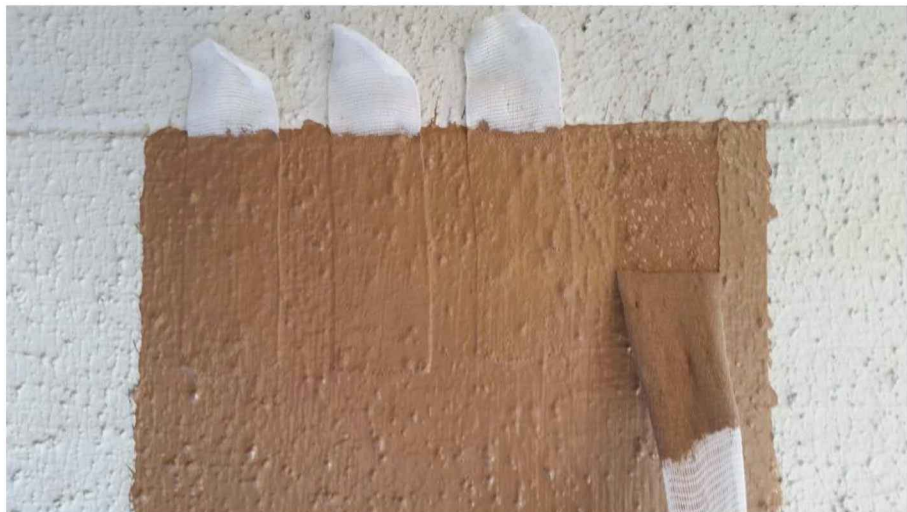
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SILICONE ELASTOMERIC COATINGS  
100% CD Set 8/12/22

09 96 53 - 1

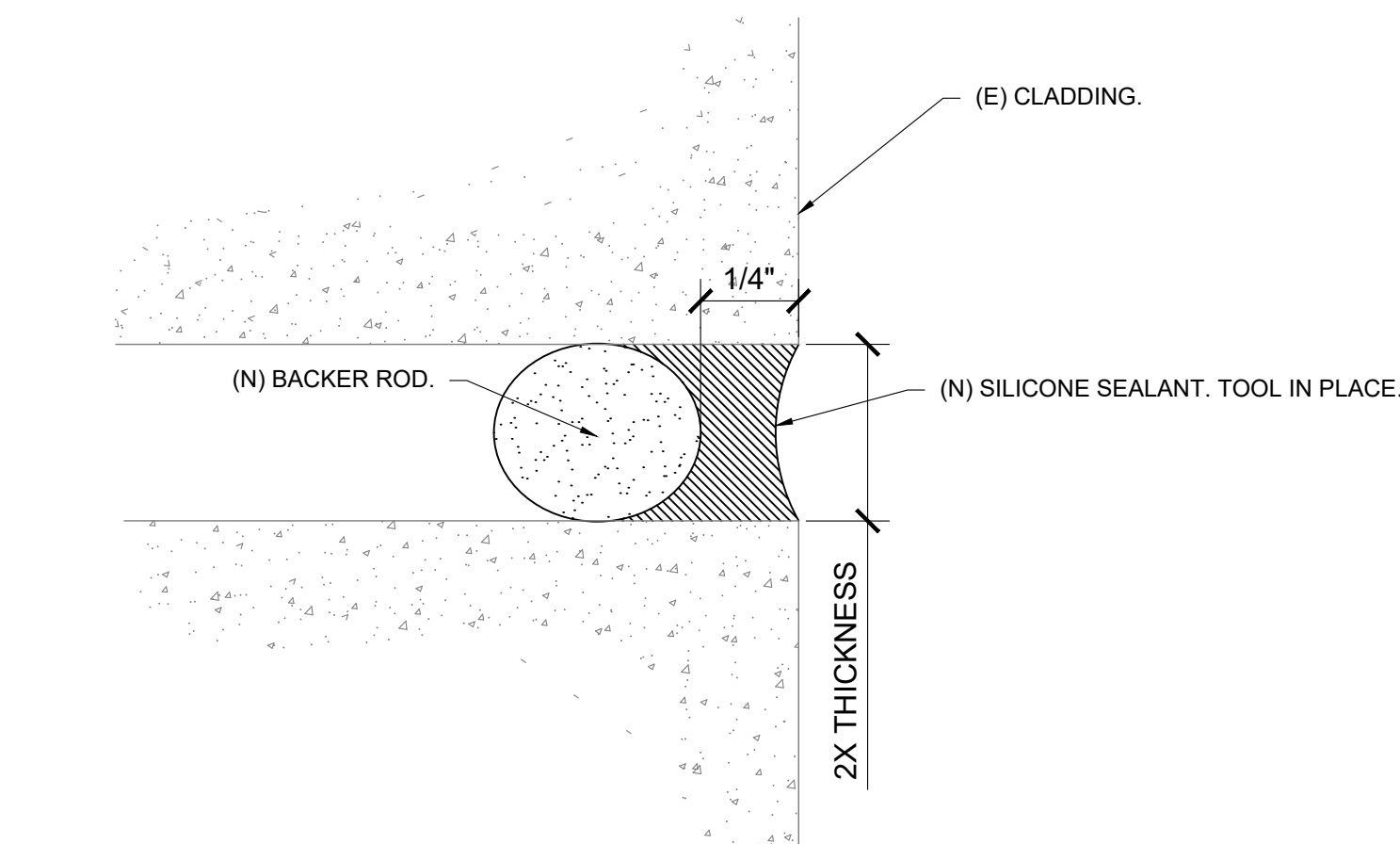
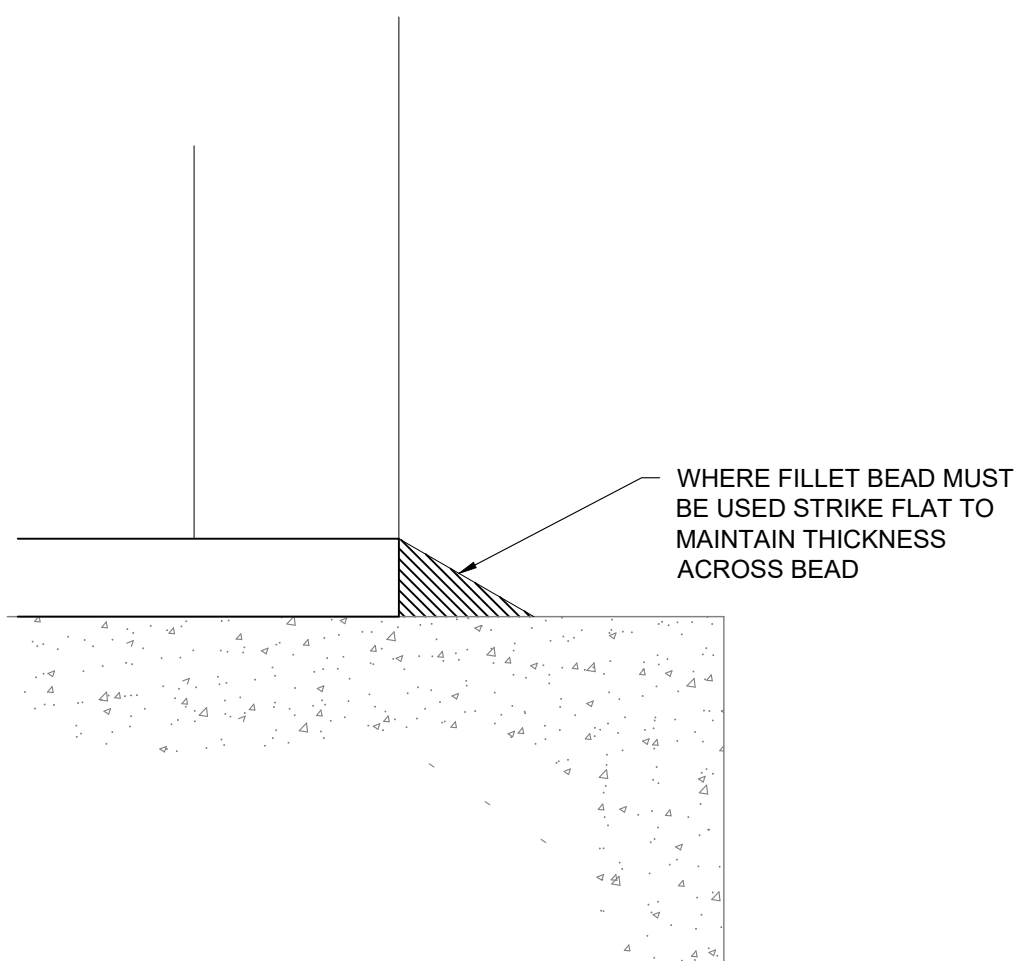
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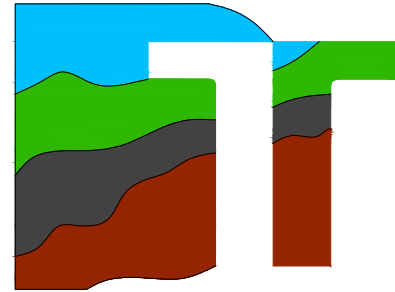
- d. If mockup samples provide Inadequate Adhesion, apply additional mockups using alternate primers as recommended by the manufacturer at no added cost to AUSD until Proper Adhesion is achieved.
- e. Architect's determination of sufficient adhesion is final.
3. Final approval of color selections and coating system components will be based on mockups.
- a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to AUSD.
4. Final approval of need for primer coat will be based on mockups.
5. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
6. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- B. MPI Standards: Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems indicated for new construction and re-finished surfaces.
- C. Source Limitations: Obtain block fillers, primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.
- D. Coordination of Work: Review other sections in which primers are provided to ensure compatibility of the total systems for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
1. Notify Architect of problems anticipated using the materials specified.

SILICONE ELASTOMERIC COATINGS  
100% CD Set 8/12/22

09 96 53 - 3



SEALANT BEAD PROFILE  
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DETAILS & SPECIFICATIONS

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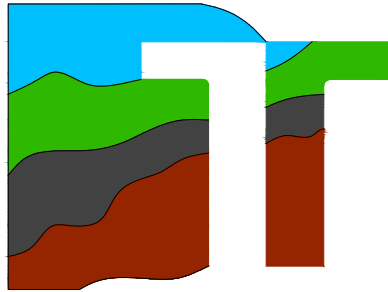
Signature Date:

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Scale:	AS NOTED
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Drawn By:	M.Haddadan
Designed By:	A. Weber

A500



<p>Alameda Unified School District– Project Number FT226038 Maya Lin Elementary Waterproofing Repairs 825 Taylor Avenue, Alameda, California</p> <p>1.8 DELIVERY, STORAGE, AND HANDLING</p> <p>A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C), or minimum temperature recommended by manufacturer.</p> <p>1. Maintain containers in clean condition, free of foreign materials and residue.</p> <p>2. Remove rags and waste from storage areas daily.</p> <p>1.9 FIELD CONDITIONS</p> <p>A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.</p> <p>B. Allow wet surfaces to dry thoroughly and attain temperature and conditions specified before starting or continuing coating operation.</p> <p>1.10 WARRANTY</p> <p>A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace elastomeric coatings that fail within specified warranty period.</p> <p>1. Failures include, but are not limited to, the following:</p> <p>a. Water penetration through the coating.</p> <p>b. Deterioration of coating beyond normal weathering.</p> <p>2. Warranty Period: Ten (10) years from date of Substantial Completion.</p> <p><b>PART 2 - PRODUCTS</b></p> <p>2.1 MANUFACTURERS</p> <p>A. Basis of Design: Dow AllGuard is the standard of quality against which the Architect will judge equivalency of materials.</p> <p>B. Acceptable Products:</p> <p>1. AllGuard Silicone Elastomeric Coating, by Dow Corning; web: <a href="http://www.dowcorning.com">www.dowcorning.com</a> .</p> <p>2. Substitutions: Approved Equal Per Division 01.</p> <p>C. Typical Physical Properties – Supplied:</p> <p>1. Specific Gravity: 9.64lb/gal, per ASTM D 1475.</p> <p>2. Solids Content: 58.6% by weight, per ASTM D 2369.</p> <p>3. Volatile Organic Content (VOC): 55 g/L, per EPA Method 24.</p> <p>D. Typical Physical Properties – Cured:</p> <p>SILICONE ELASTOMERIC COATINGS 100% CD Set 8/12/22</p> <p>09 96 53 - 4</p>	<p>Alameda Unified School District– Project Number FT226038 Maya Lin Elementary Waterproofing Repairs 825 Taylor Avenue, Alameda, California</p> <p>3.2 PREPARATION</p> <p>A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and systems indicated.</p> <p>B. Remove hardware, covers, plates, and similar items already in place that are removable and 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.</p> <p>1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.</p> <p>C. 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.</p> <p>1. Remove incompatible primers and reprime substrate with compatible primers as required to produce coating systems indicated.</p> <p>2. Perform cleaning and coating application so dust and other contaminants from cleaning process will not fall on wet, newly coated surfaces.</p> <p>D. Crack Repair: Fill cracks according to manufacturer's written instructions before coating surfaces.</p> <p>3.3 APPLICATION</p> <p>A. Apply coatings according to manufacturer's written instructions.</p> <p>1. Use applicators and techniques suited for material and substrate indicated.</p> <p>2. Coat surfaces behind movable items the same as similar exposed surfaces.</p> <p>3. Apply each coat separately according to manufacturer's written instructions.</p> <p>B. Primers: Apply at a rate to ensure complete coverage.</p> <p>C. Block Fillers: Apply at a rate to ensure complete coverage with pores filled.</p> <p>D. Elastomeric Finish Coat(s): Minimum two coats with a total dry film thickness (DFT) as recommended by manufacturer.</p> <p>E. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats similar to color of topcoat but provide sufficient difference in shade of undercoats to distinguish each separate coat.</p> <p>F. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform finish, color, and appearance.</p> <p>G. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.</p> <p>SILICONE ELASTOMERIC COATINGS 100% CD Set 8/12/22</p> <p>09 96 53 - 6</p>	<p>Alameda Unified School District– Project Number FT226038 Maya Lin Elementary Waterproofing Repairs 825 Taylor Avenue, Alameda, California</p> <p>1. Elastomeric Coating System:</p> <p>a. Prime Coat: If required based on pull tests in Section 1.7, 2 above, as recommended in writing by topcoat manufacturer.</p> <p>b. Intermediate Coat: Dow AllGuard.</p> <p>c. Topcoat: Dow AllGuard, in custom color. Intermediate and topcoat total thickness as recommended by manufacturer.</p> <p>- END OF SECTION -099653</p> <p>SILICONE ELASTOMERIC COATINGS 100% CD Set 8/12/22</p> <p>09 96 53 - 8</p>
<p>Alameda Unified School District– Project Number FT226038 Maya Lin Elementary Waterproofing Repairs 825 Taylor Avenue, Alameda, California</p> <p>1. Tensile Strength: &gt; 145 psi, per ASTM D 412.</p> <p>2. Elongation: 600%, per ASTM D 412.</p> <p>3. Vapor Permeance (at 10 mils dry film thickness): 43.2 perms, per ASTM D 1653.</p> <p>2.2 MATERIALS</p> <p>A. Material Compatibility:</p> <p>1. Materials for use within each system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.</p> <p>2. For each coat in a system, products shall be recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.</p> <p>B. Colors: Custom color(s) as selected by the AUSD. Custom colors of silicone elastomeric coatings require a longer lead time than other paints and coatings. Verify product production time with manufacturer to ensure product availability as required by the construction schedule.</p> <p>C. Material containers not displaying manufacturer's product identification will <b>NOT</b> be acceptable.</p> <p>D. Crack Fillers: Elastomeric coating manufacturer's recommended, factory-formulated crack fillers or sealants, including crack filler primers, compatible with substrate and other materials indicated.</p> <p>E. Primer: Elastomeric coating manufacturer's recommended, factory-formulated, alkali-resistant primer compatible with substrate and other materials indicated.</p> <p><b>PART 3 - EXECUTION</b></p> <p>3.1 EXAMINATION</p> <p>A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.</p> <p>B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.</p> <p>C. Begin coating no sooner than 28 days after substrate is constructed and is visually dry on both sides.</p> <p>D. Verify that substrate is within the range of alkalinity recommended by manufacturer.</p> <p>E. Proceed with coating application only after unsatisfactory conditions have been corrected.</p> <p>1. Application of coating indicates acceptance of surfaces and conditions.</p> <p>F. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter. Comply with manufacturer's moisture content requirements.</p> <p>SILICONE ELASTOMERIC COATINGS 100% CD Set 8/12/22</p> <p>09 96 53 - 5</p>	<p>Alameda Unified School District– Project Number FT226038 Maya Lin Elementary Waterproofing Repairs 825 Taylor Avenue, Alameda, California</p> <p>H. Apply coatings to prepared surfaces as soon as practicable after preparation and before subsequent surface soiling or deterioration.</p> <p>I. 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.</p> <p>3.4 FIELD QUALITY CONTROL</p> <p>A. Testing of Coating Materials: AUSD reserves the right to invoke the following testing procedures:</p> <p>1. Engage the services of a qualified testing agency to sample materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.</p> <p>2. Testing agency will perform tests for compliance of materials with product requirements.</p> <p>3. Direct Contractor to stop coating application if test results show materials being used do not comply with requirements. Remove noncomplying materials from Project site, pay for testing, and recoat surfaces that were coated with rejected materials. Remove rejected materials from previously coated surfaces if, on recoating with complying materials, the two coatings are incompatible.</p> <p>B. Field Testing and Inspection: Provide the services of a qualified manufacturer's representative to verify acceptability of substrate and installed thickness of elastomeric coatings.</p> <p>1. Contractor shall touch up and restore painted surfaces damaged by testing.</p> <p>2. If test results show that dry film thickness of applied coating does not comply with manufacturer's written recommendations or the requirements of this specification, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with specifications.</p> <p>3.5 CLEANING AND PROTECTION</p> <p>A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.</p> <p>B. After completing coating application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.</p> <p>C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.</p> <p>D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.</p> <p>3.6 ELASTOMERIC COATING SCHEDULE</p> <p>A. Existing Exterior Concrete Substrates:</p> <p>SILICONE ELASTOMERIC COATINGS 100% CD Set 8/12/22</p> <p>09 96 53 - 7</p>	



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