SECTION 09 24 10

WATER REPELLENT ADMIXTURE FOR PORTLAND CEMENT-BASED PLASTER (STUCCO)

Use the pilcrow key (¶) to view hidden text and Specifier Notes.

\*\* NOTE TO SPECIFIER \*\*

The purpose of this Guide Specification is to assist the Specifier in developing a Project Specification utilizing liquid Portland Cement-Based Plaster (Stucco) Water Repellent Admixture products manufactured and distributed by ISE Logik Industries, Inc. This Guide has been prepared to be included as part of a complete Project Manual and is not intended to be a “stand alone” document.

This section is based on the products of ISE LOGIK, Inc., which is located at:  
5635 Iron Works Road

Theodore, AL 36581

TEL: 877-549-5159

This guide specification will need to be carefully reviewed and edited by a qualified professional specification writer for applicability on the specific Project being developed.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Portland Cement-Based Plaster (Stucco) Water Repellent and Permeability Reducing Admixtures for the following:
       1. Exterior Walls.
       2. Interior Walls.
       3. Foundations.
       4. \_\_\_\_\_\_\_\_\_
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 00 00 – Concrete.
    2. Section 03 30 00 - Cast-in-Place Concrete.
    3. Section 03 41 16 - Precast Concrete Slabs.
    4. Section 04 00 00 – Masonry.
    5. Section 04 22 00 – Concrete Unit Masonry
    6. Section 07 00 00 – Thermal and Moisture Protection
    7. Section 09 20 00 – Plaster and Gypsum Board
    8. Section 09 24 00 – Portland Cement Plastering
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM International (ASTM):
       1. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens).
       2. ASTM C157 - Standard Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete.
       3. ASTM C642 - Standard Test Method for Density, Absorption, and Voids in Hardened Concrete.
       4. ASTM C926 – Application of Portland Cement-Based Plaster
       5. ASTM C1384 – Standard Specification for Admixtures for Masonry Mortars.
       6. ASTM C1403 – Standard Test Method for Rate of Water Absorption of Masonry Mortars.
       7. ASTM E96 – Standard Test Methods for Water Vaper Transmission of Materials.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data:
        1. Manufacturer's Technical Data Sheets (TDS) on each product to be used.
        2. Manufacturer’s Safety Data Sheets (SDS) showing list of all product ingredients.
        3. Preparation instructions and recommendations.
        4. Storage and handling requirements and recommendations.
        5. Typical installation methods.
        6. Manufacturer’s Health Product Declaration (HPD)
        7. Manufacturer’s Environmental Product Declaration (EPD)
        8. Manufacturer’s conformance with minimum compression strength at 7 and 28 days per ASTM C1384.
        9. Manufacturer’s conformance with reduced water absorption per ASTM C1403
        10. Manufacturer’s conformance with minimum 120% reduction in permeability per ASTM E96 as compared to non-treated specimen for full thickness (7/8 inch) three coat stucco.
        11. Manufacturer’s conformance with 0.0% shrinkage per ASTM C157.
  2. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Stucco Water Repellent and Permeability Reducing Admixture Manufacturer will have a minimum of 10-years’ experience manufacturing admixtures.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Arrange in compliance with Division 1.
     2. Attendance: Contractor, installer, owner, architect, structural engineer, civil engineer, and those requested to attend,
     3. Meeting Time: 3 weeks prior to beginning of work of this Section and work of related Sections affecting the work of this Section.
     4. Review procedures for conducting work of this Section, including:
        1. Mixing procedure.
        2. Finishing options and procedures.
        3. Review of applicable ASTM standards.
        4. Effect of the above on the project schedule.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Conform to provisions in the appropriate sections in Division 01 and the concrete admixture manufacturer instructions.
     2. Mixing: Conform to ASTM C926.
     3. Store products in accordance with manufacturer’s recommendations. Do not use admixtures that have been in storage at project site for more than 12 months or which have been subjected to freezing.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: ISE LOGIK, Inc., which is located at: 5635 Iron Works Road, Theodore, AL 36581; Tel: (877) 549-5159, Web: www.iselogik.com
      2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
   2. PORTLAND CEMENT-BASED PLASTER (STUCCO) ADMIXTURES
      1. Portland Cement-Based Plaster (Stucco) Water Repellent and Permeability Reducing Admixture:
         1. Basis of Design: STUCCODRI as manufactured by ISE LOGIK, Inc.
         2. Non-toxic, no VOCs.
         3. Product Performance:
            1. Reduced Permeability (per ASTM E96): 120% less permeable as compared to non-treated specimen for full thickness (7/8 inch) three coat stucco.
            2. Reduced Water Absorption (per ASTM C642 and C1403)
            3. Compressive Strength (per ASTM C109/C109M) – exceeds minimum required compressive strength at 7 days and 28 days per ASTM C1384.
            4. Mitigating Effect on Shrinkage (per ASTM C157) – 0.0% Shrinkage
            5. Time of Setting (per ASTM C266) – meets minimum and maximum set time range per ASTM C1384.
2. EXECUTION
   1. WEATHER CONDITIONS
      1. For installation in all weather conditions. Utilize ASTM C926 approved methods to minimize premature drying, shrinkage and cracking.
   2. INSTALLATION FOR WATER REPELLENT ADMIXTURES
      1. Comply with the Admixture Manufacturer's instructions and recommendations.
   3. FIELD QUALITY CONTROL

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. PROTECTION
     1. Protect installed work from damage due to subsequent construction activity on the site.

END OF SECTION