AQUASTAIN HS

Decorative and Protective, Water-Based, Acrylic Stain

{Note to Specifier: The paragraphs below are meant to be incorporated into Parts 2 and 3 of a standard CSI 3 Part Format specification, the General Structural Notes, or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the requirements of the project and governing building codes. Coordinate with other specification sections and drawings.}

PART 1: GENERAL

*{Note to Specifier: Insert the following paragraph and sub paragraphs as required for your project. Euclid’s recommended products are shown in italics. More info can be found on these products at* [*www.euclidchemical.com*](http://www.euclidchemical.com) *or by clicking on the product links.}*

1.01 RELATED WORK:

A. Joint Fillers – [Eucolastic](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/polyurethane-sealants/), [Tammsflex](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/polysulfide-sealants/), [Dural 340](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/epoxy-fillers-sealants/dural-340-nssl/), [Qwikjoint UVR](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/polyurea-joint-fillers/euco-qwikjoint-uvr/)

B. Concrete Repair:

1. Vertical and Overhead: [Euco V-100](http://euclidchemical.com/products/construction-products/repair/verticaloverhead-repair/eucorepair-v100/), [Tamms Structural Mortar](http://euclidchemical.com/products/construction-products/repair/verticaloverhead-repair/tamms-structural-mortar/)

2. Horizontal: [Express Repair](http://euclidchemical.com/products/construction-products/repair/horizontal-repair/cementitious-mortars/express-repair/), [VersaSpeed](http://euclidchemical.com/products/construction-products/repair/horizontal-repair/cementitious-mortars/versaspeed/)

3. Form and Pour: [Eucocrete](http://euclidchemical.com/products/construction-products/repair/horizontal-repair/cementitious-mortars/eucocrete/)

C. Crack Repair/Injection: [Dural 452 LV](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/dural-452-lv/), [Dural Fast Set Epoxy Gel](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/dural-fast-set-gel/)

D. Bonding Agents: [Duralprep A.C.](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/duralprep-ac/), [Dural 452 MV](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/dural-452-mv/)

E. Waterproofing/Dampproofing : [Tamoseal](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/waterproofing-dampproofing/tamoseal/), [Vandex Super](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/vandex-waterproofing/crystalline-waterproofing/vandex-supersuper-white/), [Hey’Di K-11](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/waterproofing-dampproofing/heydi-k-11/), [Vandex BB75](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/vandex-waterproofing/cementitious-slurry-coatings/vandex-bb-75/)

F. Architectural Coatings: [Tammscoat](http://euclidchemical.com/products/construction-products/coatings/architectural-wall-coatings/tammscoat/), [Tammolastic](http://euclidchemical.com/products/construction-products/coatings/architectural-wall-coatings/tammolastic/)

G. Anti-Graffiti Coatings: AG 100, [AG-400](http://euclidchemical.com/products/construction-products/coatings/architectural-wall-coatings/tamms-ag-400/),

H. Traffic Deck Coatings: [Tammsdeck](http://euclidchemical.com/products/construction-products/coatings/traffic-deck-coatings/urethane-based/tammsdeck-system/), [Flexdeck](http://euclidchemical.com/products/construction-products/coatings/traffic-deck-coatings/urethane-based/flexdeck-system/)

I. Decorative Floor Coatings: [Duraltex](http://euclidchemical.com/products/construction-products/coatings/decorative-floor-coatings/epoxy-based/duraltex/)

J. Epoxy Chemical Resistant Coatings: [Duralkote 240](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duralkote-240/), [Duralkote 500](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duralkote-500/), [Duraltex 1705/07](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duraltex-1705-1707/), [Duraltex 1805/07](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duraltex-1805-1807/)

K. Penetrating Water Repellents:

1. Horizontal and Vertical: [Baracade WB 244](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/baracade-wb-244/), [Baracade 100C](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/baracade-silane-100c/), [Baracade Silane 40 IPA](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/baracade-silane-40-ipa/)

2. Vertical: [Chemstop WB Regular/Heavy Duty](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/chemstop-wb-regularheavy-duty/)

L. Penetrating Epoxy Sealer: [Euco #512 VOX Epoxy Sealer](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/euco-512-vox-epoxy-sealer/)

M. Cathodic Protection: [Sentinel Galvanic Anodes](http://euclidchemical.com/products/construction-products/repair/cathodic-protection/sentinel-galvanic-anodes/)

1.02 JOB SITE CONDITIONS

A. Material shall be stored at temperatures between 50 and 90 deg F.

B. Do not apply Acrylic Stain to frozen or frost filled substrates, or when ambient and surface temperature is below 45°F (10°C), or above 90° F (32°C).

C. Do not apply to exterior surfaces if rain is expected within 8 hours.

1.2 QUALITY ASSURANCE

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A. Acrylic Stain Mock-Up:

1. Prior to commencing cementitious coating application, prepare a minimum **<<insert size>>** full scale, reference mock-up of each type, and color of acrylic stain for approval by Owner. Said reference mock-up shall be constructed in location designated by owner/architect, using the same materials, equipment, tools and methods for installing all materials as will be used for the remaining work to be performed.

PART 2: PRODUCT

2.01 ACRYLIC STAIN

A. Acrylic Stain: Provide water-based acrylic stain designed to both protect and decorate vertical masonry and concrete surfaces. Product shall exhibit the following properties at 75 deg F.

1. Solids by Weight: 55 to 60%

2. Water Permeability per ASTM E514:

|  |  |  |
| --- | --- | --- |
|  | Reference | AquaStain HS |
| Dampness Shows | 10 minutes | None |
| First Water Shows | 12 minutes | None |
| Dampness Area Back of Wall in 4 hrs. | 75% | None |

3. Wind Driven Rain per TT-C 555b: Excellent

4. Water Vapor Trans. per ASTM E96: 12 to 14 perms

5. Weatherometer per ASTM G26:

6,000 hrs. No crazing, cracking, chipping or flaking

6. Carbon Dioxide Diffusion, AS/NZS 4548.5

Diffusion Coefficiant 1.1 X 10-6cm2sec-1

Diffusion Resistance Coefficient 155,900

Klopfer Criteria passes

7. Freeze Thaw Durability per ASTM C666:

300 cycles 100.9%

8. Scaling Resistance per ASTM C672

Visual Rating 0

25 cycles scaling mass None

9. Fungus Growth: Fed Test 141 method 6271:

28 days None

10. Salt Spray Resistance per ASTM B117 5% solution

2,000 hrs @ 90°F ± 2˚F No adhesion loss

11. Impact Resistance per ASTM D2794 No Chipping

12. Flexibility per ASTM D522

1” (25 mm) mandrel No chipping or breaking

13. Abrasion Resistance per ASTM C418 0 mils abraded

14. Product:

a. Euclid Chemical (The); AquaStain HS, www.euclidchemical.com

b. Color: As chosen by owner’s representative from manufacturer’s standard color selection.

**B. Manufacturer shall have ISO 9001 Quality Certification.

*{Note to Specifier: Euclid Chemical recommends the use of Tamms H/P Primer when Aquastain HS is to be applied to concrete and masonry surfaces during hot or windy conditions. Insert language below to include Tamms H/P Primer in your specification.}*

2.02 PRIMER FOR HOT WINDY CONDITIONS

A. Primer for Hot / Windy Conditions: Provide 100% acrylic primer designed to create a breathable barrier within the substrate surface that will retard absorption of moisture from the finish coating and to aide in proper cure of the coating.

1. Product:

a. Euclid Chemical Co. (The): Tamms H/P Primer www.euclidchemical.com

B. Primer shall be by same manufacturer as the Acrylic Stain.

PART 3: EXECUTION

3.01 SURFACE PREPARATION

*{Note to Specifier: Based on ACI 302 recommendations, joint fillers should be applied as late as possible after construction to allow for minimal additional slab shrinkage. Consult ACI 302 comments regarding concrete shrinkage, joint filling and user expectations.}*

A. New concrete and masonry surfaces must be a minimum 28 days old.

B. Concrete surfaces to receive acrylic stain must be structurally sound, free of loose or deteriorated concrete and clean of dust, dirt, paint, efflorescence, oil and all other contaminants. Preparation shall be done by mechanical means to achieve a surface profile equal to CSP 1 to 2 in accordance with ICRI Guideline 310.2.

*{Note to Specifier: Euclid Chemical recommends the use of Tamms H/P Primer when Aquastain HS is to be applied to concrete and masonry surfaces during hot or windy conditions. Insert language below to include Tamms H/P Primer in your specification.}*

3.02 PRIMER FOR HOT WINDY CONDITIONS APPLICATION

A. Do not apply Primer for Hot / Windy Conditions to exterior surfaces if rain is expected within 4 hours or if the primed surface cannot be top coated within 24 hours.

B. Apply Primer for Hot / Windy Conditions per manufacturer’s recommendations utilizing airless spray equipment recommended by manufacturer or brushes and rollers designed for latex paints.

C. Thoroughly wet the surface with Primer for Hot / Windy Conditions to the point of saturation with no run down.

**1. Apply within manufacturer’s published coverage rates.

2. Porous Surfaces 100 to 150 square feet per gallon.

3. Non-Porous Surfaces: 200 to 300 square feet per gallon.

4. Actual coverage will vary dependent on surface temperature, porosity, and texture will be determined at time of mock-up.

D. Where brushes and rollers are used, final finish strokes shall be in one direction only.

E. Acrylic Stain may be applied as the primer dries, but no later than 24 hours after primer application.

3.02 ACRYLIC STAIN APPLICATION

*{Note to Specifier: Insert desired approximate coverage rates below. First coat coverage for porous surfaces will range from 100 to 150 square feet per gallon. Second coat will be 100 to 150 square feet per gallon. First coat coverages for smooth surfaces will range from 120 to 170 square feet per gallon. Second coat will be 130 to 180 square feet per gallon. Coverage rates will vary depending on surface temperature, porosity and texture. Insert appropriate language below.}*

A. Apply **[1][2]** coat**[s]** per manufacturer’s recommendations utilizing airless spray equipment recommended by manufacturer or brushes and rollers designed for latex paints. Where brushes and rollers are used, final finish strokes shall be in one direction only.

1. Apply within manufacturer’s published coverage rates.

2. First Coat: **[100 to 150][120 to 170]** square feet per gallon

3. Second Coat: **[100 to 150][130 to 180]** square feet per gallon

4. Actual coverage will vary dependent on surface temperature, porosity, and texture will be determined at time of mock-up.

END OF SECTION