TAMMSCOAT

Decorative and Protective, Water-Based, Acrylic Coating

{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://www.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. Protect from freezing.

B. Do not apply Acrylic Coating 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 Acrylic Coating to exterior surfaces if rain is expected within 8 hours.

1.2 QUALITY ASSURANCE

A. Acrylic Coating Mock-Up:

1. Prior to commencing coating application, prepare a minimum **<<insert size>>** full scale, reference mock-up of each type, texture and color of Acrylic Coating 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 COATING

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

1. VOC Content: < 50 g/L

2. Water Permeability per ASTM E514:

|  |  |  |
| --- | --- | --- |
|  | Reference | Tammscoat |
| 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

10. Product:

a. Euclid Chemical (The); Tammscoat **[Smooth][Fine]**, 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 Tammscoat 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

*{Note to Specifier: Euclid Chemical recommends the use of Tamms Masonry Primer 100% acrylic primer on porous concrete and masonry surfaces. Insert language below to include Tamms Masonry Primer in your specification.}*

2.02 BLOCK FILLER / PRIMER

A. Acrylic Block Filler and Primer: Provide 100% acrylic, water-based, block filler and primer designed specifically for application to concrete and masonry surfaces. Product shall exhibit the following properties at 75 deg F.

1. Solids by Weight: 70 +/-2%

2. Solids by Volume: 52.5%

3. VOC Content: <10 g/L

4. Water Permeability per ASTM E514:

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

5. Water Vapor Trans. per ASTM E96

20 mils 12 perms

6. Weatherometer per ASTM G26

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

Light chalk and color change.

No other deterioration.

7. Freeze Thaw Durability per ASTM C666:

300 cycles 100.9%

8. Scaling Resistance per ASTM C672**,** 25 cycles

Visual Rating 0

Scaling mass None

9. Fungus Growth: Fed Test 141 method 6271:

28 days None

10. Salt Spray Resistance per ASTM B117 5% solution

300 hrs @ 90°F ± 2˚F No adhesion loss

11. Product:

a. Euclid Chemical (The); Tamms Masonry Primer, www.euclidchemical.com

B. Block Filler and Primer shall be by same manufacturer as the Acrylic Coating.

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 Coating 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 Tammscoat 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 Coating may be applied as the primer dries, but no later than 24 hours after primer application.

*{Note to Specifier: Euclid Chemical recommends the use of Tamms Masonry Primer 100% acrylic primer on porous concrete and masonry surfaces. Insert language below to include Tamms Masonry Primer in your specification.}*

3.02 ACRYLIC BLOCK FILLER AND PRIMER APPLICATION

A. Apply Acrylic Block Filler / Primer to the surface using manufacturer’s recommended heavy duty spray equipment capable of spraying ceiling texture, plaster or cement based coatings, or use stiff brushes or rollers. When sprayed, backrolling is required to ensure good uniform contact with the surface. Avoid applying to excess which can cause the product to run down the wall or puddle.

1. Apply within manufacturer’s published coverage rate of 40 to 80 square feet per gallon. Surface temperature, porosity, and texture will determine actual coverage rate required.

B. Acrylic Coating may be applied 12 to 24 hours following the Acrylic Block Filler / Primer application.

3.02 ACRYLIC COATING APPLICATION

{Note to Specifier: Recommended coverage rates for Tammscoat Smooth and Tammscoat Fine are as follows. Insert appropriate coverage rates below:}

|  |  |  |
| --- | --- | --- |
| **Tammscoat Smooth** | **1st Coat** | **2nd Coat** |
| Porous Surfaces | 80 to 100 sq. ft. per gallon | 80 to 100 sq. ft. per gallon |
| Smooth Surfaces | 80 to 120 sq. ft. per gallon | 100 to 130 sq. ft. per gallon |

|  |  |  |
| --- | --- | --- |
| **Tammscoat Fine** | **1st Coat** | **2nd Coat** |
| Porous Surfaces | 50 to 65 sq. ft. per gallon | 60 to 75 sq. ft. per gallon |
| Smooth Surfaces | 75 to 100 sq. ft. per gallon | 85 to 110 sq. ft. per gallon |

A. Apply **[1][2]** coat**[s]** per manufacturer’s recommendations utilizing spray equipment recommended by manufacturer or brushes and rollers (1 ½” nap) 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: **[80 to 100][80 to 120][50 to 65][75 to 100]** square feet per gallon

3. Second Coat: **[80 to 100][100 to 130][60 to 75][85 to 110]** 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