HEY’DI K-11

Polymer Modified Crystalline Waterproofing Coating

{Note to Specifier: The paragraphs below are meant to be incorporated into Parts 1, 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 and edited by a qualified design professional 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 QUALITY ASSURANCE

A. Installer Qualifications: Experienced installer who has successfully completed 5 jobs of similar size and scope in the prior 5 years.

1.03 MOCKUP

A. Cast 6’ by 6’ slab and wall mockups to demonstrate typical joints, surface finish, texture, color, and standard of workmanship.

B. Notify Engineer at least 7 days in advance of date and time mockup will be constructed.

C. Obtain approval of mockup by owner’s representative before starting construction.

D. Maintain approved mockup in undisturbed condition throughout construction as standard for completed pavement.

E. Demolish and remove mockup from site at completion of Work unless approved by owner’s representative to become part of completed Work.

1.04 PRE-APPLICATION MEETING

A. Prior to the start of concrete placement Contractor shall conduct a meeting to review the required methods and procedures to achieve the required finish. Contractor shall send a meeting agenda to all attendees 20 days prior to the scheduled date of the meeting.

B. The Contractor shall require responsible representatives of every party concerned with the concreting work to attend the meeting, including but not limited to the following: Contractor’s superintendent, ready-mix company, testing lab, waterproofing applicator, and owner’s representative.

C. Minutes of the meeting shall be recorded, typed, and distributed by the Contractor to all concerned parties, including but not limited to the owner’s representative and all attendees within 5 days of the meeting.

PART 2: PRODUCTS

2.01 WATERPROOFING

A. NSF/ANSI Standard 61 approved, VOC compliant, breathable, cement based, polymer modified, crystalline waterproofing that can be applied by brush or spray. Material shall exhibit the following properties:

 1. Adhesion of 175 psi @ 75 deg F per ASTM C952

 2. Tensile Strength per ASTM C190

a. 332 psi @ 100% RH

b. 118 psi @ 50% RH

 3. Flexural Strength of 472 psi @ 75 deg F per ASTM C580

 4. Permeability per CRD 48-73

a. Two coats tested with water pressure @ 200 psi (1.4 MPa) resulted in permeability of 5.2 x 10-10 (ft3 /sec.)/(ft2 /ft head/ft))

5. Product:

a. Euclid Chemical Company (The); Hey’DI K-11 with Hey’DI SB Bonding Agent, [www.euclidchemical.com](http://www.euclidchemical.com)

b. Color: **[Gray][White]**

B. To ensure compatibility, all products shall be from the same manufacturer, who shall have ISO 9001 certification.

PART 3: EXECUTION

3.01 SURFACE PREPARATION

A. Concrete shall be a minimum of 7 days old.

B. Concrete substrate shall be structurally sound and free from deteriorated concrete, dust, dirt, paint, oil, efflorescence, laitance, curing compounds and other contaminants. Blow clean using unoiled air.

C. Concrete honeycombs, cavities, joints, cracks, voids, tie holes and other defects must be opened and routed to sound material.

D. No active water leaks should be present at the time of application.

E. Surface profile shall be CSP 1-3 per ICRI Guideline 310.2–1997 (formerly 03732) “Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays”.

F. Once prepared, the substrate needs to be soaked with water to a saturated, surface-dry (SSD) condition just prior to the application of the material

3.02 WATERPROOFING APPLICATION

A. Dilute manufacturer’s recommended liquid polymer additive as noted on manufacturer’s literature and mix with Cementitious Coating per manufacturer’s published instructions

B. Apply first coat at rate of 2.25 pounds per square yard per manufacturer’s written recommendations.

B. Allow first coat to cure for 24 hours then mix waterproofing and apply second coat at rate of 2.25 pounds per square yard per manufacturer’s written recommendations.

C. Hand Brush Application: Apply Waterproofing at manufacturer’s published coverage rates using a masonry brush. Load bristles with material and apply a heavy coat using long, smooth horizontal strokes. Apply sufficient material to fill all voids. Final strokes should all be in one direction to produce an even texture and finish. Final strokes for the second coat shall be perpendicular to the final strokes of the first coat.

D. Spray Application: Use heavy-duty spray equipment capable of spraying cement coatings or mastics. Contact manufacturer for recommendations.

1. Once first coat has been sprayed on the surface utilize a brush or trowel to work material into the substrate. Final strokes shall all be in one direction to produce an even texture and finish. Back brushing is not required for the second coat.

END OF SECTION