**DURAL 335**

Solvent-free, two-component, 100% solids, moisture insensitive, ultra-low viscosity epoxy penetrating healer-sealer for damp and dry cracks.

***{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, project’s General Structural Notes or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the particular requirements of the project at hand, assure compliance with any governing building codes, and coordinate with other specification sections and drawings.}***

PART 1 GENERAL

1.01 QUALITY ASSURANCE

A. Obtain crack healer sealer materials from one single manufacturer. Obtain secondary materials including aggregates, sheet flashings, joint sealants, and substrate repair materials of type and from source recommended by crack healer sealer materials manufacturer.

1. Crack healer sealer manufacturer shall have ISO 9001 Quality Certification.

B. Resinous Crack Healer Sealer Crack healer sealer Mock-Up:

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

2. Once accepted by owner or owner’s representative, mock-up is to remain, and is to be protected from damage. It shall become the standard for acceptance of color and texture for resinous crack healer sealer crack healer sealer applications.

3. When Architect determines that mockup does not meet requirements, demolish and remove it from the site and cast another until the mockup is accepted.

1.02 PROJECT CONDITIONS

A. Environmental Limitations: Apply crack healer sealer within the range of ambient and substrate temperatures recommended in writing by manufacturer.

1. Do not apply when rain is expected within 12 hours.

2. Do not apply if surface temperature is within 5 deg F of the dew point.

B. Conditions for Concrete

1. New concrete shall be in place a minimum 28 days before proceeding.

2. Any cementitious repair mortars must have a full 7-day cure prior to crack healer sealer application unless otherwise approved in writing by architect.

3. Examination:

a. Prior to commencement of crack healer sealer application examine substrates, with Applicator present, for compliance with requirements and for other conditions affecting performance of crack healer sealer.

b. For the record, prepare written report, endorsed by Applicator, listing conditions detrimental to performance.

c. Verify compatibility with and suitability of substrates.

d. Contractor must report, in writing, surfaces left in improper condition by other trades. Application of crack healer sealer indicates acceptance of surfaces and conditions.

PART 2.0 PRODUCTS

2.01 CRACK HEALER SEALER SYSTEM

A. Low Viscosity Epoxy Healer Sealer: Two component, 100% solids, moisture insensitive, ultra-low viscosity epoxy penetrating healer sealer for damp or dry cracks in concrete surfaces.

1. Mixed Viscosity: 80 to 100 cps @ 75 deg F.

2. Tensile Strength 7,000 to 8,000 psi per ASTM D 638

3. Tensile Elongation 1% to 5%

4. Product:

a. Euclid Chemical Company (The); DURAL 335, [www.euclidchemical.com](http://www.euclidchemical.com)

PART 3.0 EXECUTION

3.01 SURFACE PREPARATION

A. Clean and mechanically prepare substrates according to manufacturer’s written recommendations to produce clean, sound, dust-free, absorptive substrate free of grease, oils, curing compounds, surface laitance, soil and other contaminants which may interfere with bond of crack sealer healer. Surface profile should be equal to CSP 2 to 5 in accordance with ICRI Guideline 310.2. Steel surfaces should be blasted in accordance with SSPC-SP10 to a “NEAR WHITE” finish using clean dry blasting media.

1. Begin crack healer sealer application only after minimum concrete curing and drying period recommended by crack healer sealer manufacturer has passed, and after unsatisfactory conditions have been corrected.

B. Prepare vertical and horizontal surfaces at terminations and penetrations through crack healer sealer and at expansion joints, drains, and sleeves according to manufacturer’s written recommendations.

C. Mask adjoining surfaces not receiving crack healer sealer, drains, and other substrate penetrations to prevent spillage, leaking, and migration of crack healer sealers.

3.02 CRACK SEALER HEALER APPLICATION:

A. Mix and apply crack sealer healer per manufacturer’s written recommendations.

# 1. Mechanical Mixing- Crack healer sealer shall be thoroughly utilizing a mechanical drill with a manufacturer approved mixing blade. Premix individual components separately per manufacturer’s recommendations then combine materials and mix per manufacturers recommendations. Bottom and sides of container may be scraped during mixing but shall not be scraped once mixing has ceased. Do not aerate material.

2. Apply crack sealer healer in a wave form, and spread uniformly with a squeegee or a short nap roller to fill voids, cracks, and porous areas. Allow epoxy to penetrate into the surface, re-applying to cracks and porous areas as necessary.

3. Before the crack sealer healer becomes tacky, use a squeegee (on a smooth surface) or a broom (on a textured or tined surface) to remove any excess epoxy that has not penetrated the surface.

4. Broadcast clean, oven-dried silica sand into the wet epoxy to provide a skid-resistant surface, or where subsequent toppings or coatings will be applied.

a. Broadcast the silica sand at an approximate rate of 0.2 to 0.8 lbs/yd2 (0.11 to 0.43 kg/m2) and/or until there are no wet spots. Wait until at least 20 minutes have elapsed since crack sealer healer application before broadcasting aggregate, but broadcasting must be completed before crack sealer healer has become tack free.

5. Ensure that subsequent coatings or toppings are applied no earlier than 3 to 5 hours (at 75°F (24°C)) after crack sealer healer application, but no later than 24 hours after application.

3.03 CURING AND PROTECTING

A. Prevent contamination and damage during application and curing stages.

B. Protect crack healer sealer from damage and wear during remainder of construction period.

END SECTION